ABSTRACT

Title of Thesis: THE RELATIONS AMONG MATERNAL DEPRESSION, PARENTING BEHAVIORS, AND ADOLESCENTS' PERCEPTIONS OF FAMILY FUNCTIONING: THE MODERATING EFFECT OF MOTHERS' COUPLE RELATIONSHIP STATUS

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This study examined relations among maternal depression, parenting behaviors, and adolescents' perceptions of family functioning. It also investigated whether parenting behavior mediated the relation between maternal depression and adolescents' perceptions of family functioning, as well as whether mother's couple relationship status moderated the relation between depression and parenting behavior. Maternal depression was not associated with adolescents' perceptions of family functioning. Maternal depression was associated with authoritarian and permissive parenting but not with authoritative parenting. Authoritarian and permissive parenting was associated with adolescents' perceptions of less positive family functioning, whereas authoritative parenting was associated with perceptions of more positive family functioning. Parenting behavior did not mediate between maternal depression and adolescents' perceptions of family functioning. Overall, mother's couple relationship status did not moderate the relation between maternal depression and parenting behavior; but there was a trend for the relation between depression and permissive parenting to be stronger when mothers were unpartnered.

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Thesis submitted to the Faculty of the Graduate School of the University of Maryland, College Park; in partial fulfillment of the requirements for the degree of Master Science 2008

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ACKNOWLEDGEMENTS

I am pleased to recognize those individuals who have supported me in this endeavor.

Norm – Thank you for all of your guidance throughout this process! I appreciate your enthusiasm for research and your ability to share that enthusiasm with others. I have learned so much from you.

Leigh and Carol – Thank you for encouraging me to conceptualize this project in new ways and to further my understanding of research. I appreciate all of the feedback you gave me along the way.

The Marriage and Family Therapy Class of 2006: Annie, Hannah, Joanna, Jocelyn, Kate, Katie, Kirk, Nicole, and Reena – Thank you for the encouragement, strength, dedication, humor, and wisdom that you've shared with me during this project and this program. I value your friendships and am blessed to have had all of you as my classmates and colleagues.

My family: my parents Don and Ellie, my brother Tad, and my sister-in-law Jen – Thank you for fostering my value of learning, showing me the strength and importance of family, and encouraging my desire to achieve.

Joe – Thank you for the encouragement, patience, and love that you've given me over the past two years. Thank you for believing in me throughout this process.

Acknowledgements	ii
Table of Contents	iii
List of Tables	v
List of Figures	vi
Chapter 1: Introduction	1
Statement of the Problem	1
Purpose	6
Review of Literature	8
Theoretical Framework	8
Overview of Literature on Maternal Depression, Parenting Behaviors, Family	
Functioning, and Mothers' Couple Relationship Status	9
Research on Maternal Depression and Family Functioning	10
Research on Maternal Depression and Parenting Behaviors	19
Research on Parenting Behaviors and Family Functioning	24
Research on the Relations of Mothers' Couple Relationship Status with Maternal	1
Depression, Parenting Behaviors, and Family Functioning	27
Research focusing on single mothers only	28
Potential moderating effects of mother's couple relationship status.	29
Summary	31
Definitions of Variables	33
Independent Variable: Maternal Depression	33
Mediating Variable: Parenting Behaviors	33
Authoritarian parenting style.	33
Permissive parenting style.	33
Authoritative parenting style	34
Dependent Variable: Adolescents' Perception of Family Functioning	34
Moderating Variable: Mother's Couple Relationship Status	34
Hypotheses	35
Chapter 2: Method	39
Participants	39
Demographic Information	39
Mothers	39
Adolescents	41
Procedure	42
Measures	42
Depression	42
Parenting Behaviors	44
Adolescent's Perception of Positive Family Functioning	45
Mother's Couple Relationship Status	47
Chapter 3: Results	50
Overview of Analyses	50
Test of the Hypotheses	51
Exploratory Analyses	58
Chapter 4: Discussion	60

TABLE OF CONTENTS

Summary of Findings	
Limitations	
Implications	
Research Implications	
Implications for Clinical Practice	
Appendix A: BDI	
Appendix B: PPQ	
Appendix C: SFI	
Appendix D: Demographic Questionnaire	
References	

LIST OF TABLES

Table 1: Frequencies and Percentages of Relationship Status of Mothers 40
Table 2: Frequencies and Percentages of Race/Ethnicity of Mothers and Adolescents 41
Table 3: Frequencies and Percentages of Education Level and Occupation of Mothers 41
Table 4: Definitions of Variables and Tools of Measurements 48
Table 5: Means, Standard Deviations, and Correlations of Maternal Depression,
Parenting Behaviors, and Adolescents' Perceptions of Family Functioning 52
Table 6: Cell Means for Permissive Parenting for the Interaction between Mother's
Couple Relationship Status and Maternal Depression56
Table 7: Summary of Hypotheses, Statistical Analyses, and Results

LIST OF FIGURES

Figure 1: Diagram of the Present Study	37
Figure 2: Diagram of the Proposed Cell Means for Interaction between Mothers' Co	ouple
Relationship Status and Maternal Depression	38

THE RELATIONS AMONG MATERNAL DEPRESSION, PARENTING BEHAVIORS, AND ADOLESCENTS' PERCEPTION OF FAMILY FUNCTIONING: THE MODERATING EFFECT OF MOTHERS' COUPLE RELATIONSHIP STATUS

Chapter 1: Introduction

Statement of the Problem

Theoretical and empirical literature have pointed to the strong influences that parental characteristics can have on children in the family. The present study was intended to add to knowledge in this area specifically by examining the relation between maternal depression and adolescents' perceptions of the quality of family functioning, and the degree to which that relationship is mediated by mothers' parenting behavior.

Depression commonly affects the functioning of adults in their daily lives, including having an impact on their interpersonal relationships. Kendler and Prescott (1999) found that a third of women will experience depression at some point in their lifetime, and the World Health Organization has projected that by the year 2020 depression will have the highest burden of all the health related conditions in women (Murray & Lopez, 1996). Studies have shown that parenting stress can impact the incidence of depression in women, therefore increasing the risk of mothers developing depression (Tan & Rey, 2005).

Consistent with family systems theory, which emphasizes the mutual influences that members of a family have on one another, depression in parents has been found to affect child adjustment. Studies have shown that children in families in which one or more parents suffer from depression have a heightened likelihood for internalizing (e.g., depression, anxiety) and externalizing (e.g., conduct disorders) behavioral problems

(Cummings, 1995). Research has extensively explored maternal depression as it relates to child and adolescent emotional behavioral problems, finding substantial evidence of such a link (Cummings, 1995; Cummings, Davies, & Campbell, 2000; Lewinsohn, Olino, & Klein, 2005).

Although it is important to identify the association between parental mental health and child adjustment, in order to understand the *process* through which this link occurs and design effective treatments for families experiencing parental depression, further research is needed on possible mediating variables. In Goodman and Gotlib's (1999) review of maternal depression and child maladjustment, they proposed that several factors may mediate the relation between these variables. Two factors that they proposed were maternal parenting behaviors and the family environment. Some studies have explored these mediating factors, examining the relations among maternal depression, parenting behavior, family environment, and child maladjustment. These studies found that parental nurturance, parental rejection, the level of family conflict, and marital discord mediated the relation between maternal depression and emotional and behavioral problems in children. For instance, in families with maternal depression, parental nurturance predicted fewer emotional and behavioral problems, whereas parental rejection, high levels of family conflict, and marital discord predicted more emotional and behavioral problems in children (Burt et al., 2005; Cummings et al., 2000; Elgar, Mills, McGrath, Waschbusch, & Brownridge, 2007).

In spite of the past research exploring the link between maternal depression and child outcomes such as internalizing and externalizing problems, there is little that explores maternal depression as it specifically relates to child and adolescent subjective

experiences of the family's functioning. Exploring other ways in which children are influenced by maternal depression is important in delineating interventions and treatment programs to combat the negative effects of depression on families. Additionally, past research that has investigated maternal depression and family functioning often focused only on a part of family functioning, such as adjustment to family discord, level of family conflict, or family expressiveness (Gartstein & Fagot, 2003; Horwitz, Briggs-Gowan, Storfer-Iser, & Carter, 2007; Koblinsky, Kuvalanka, & Randolph, 2006; Sarigiani, Heath, & Camerena, 2003). Few studies investigated overall family functioning to include degree of communication, problem-solving, level of conflict, and emotional expressiveness (Dickstein et al., 1998; Meyers, Varkey, & Aguirre, 2002). The present study was designed to address this need for more information on the relation between maternal depression and overall family functioning, specifically adolescents' perceptions of family functioning.

As noted earlier, Goodman and Gotlib (1999) proposed that parenting behavior may mediate the association between maternal depression and negative child outcomes. There are three lines of prior research that have lent some support for this idea. First, research that explored maternal depression as it relates to parenting behaviors found that parental depression was related to forceful control strategies, rejecting behavior toward children, and ineffective child management (Burt et al., 2005; Cummings et al., 2000; Elgar et al., 2007).

Second, many studies have investigated the relation between parenting behaviors and internalizing and externalizing behaviors in children and adolescents (Baumrind, 1971, 1991; Burt et al., 2005). Most research investigating effects of parenting behaviors

focused specifically on the overt behavioral outcomes for children. The goal of such studies has been to determine the relative effectiveness of different parenting styles. However, there has been minimal research on the relation between parenting behaviors and children's perceptions of overall family functioning. This is important since children's overall experiences of their family's environment can influence their personal adjustment. For example, past studies have shown that family conflict, low parental warmth, minimal parental involvement, and poor parent-child relationships can affect the social, academic, and psychological adjustment of children and adolescents (Cummings et al., 2000; Jones, Forehand, Brody, & Armistead, 2003; Matjasko, Gruden, & Ernst, 2007; Whitbeck, Simons, Conger, Wickrama, Ackley, & Elder, 1997).

Finally, a few studies have examined parenting behavior as a mediator of the relation between parental depression and child or adolescent internalizing and externalizing behavior problems. These studies found that parental rejection, nurturance, monitoring, and warmth mediated the relation between maternal depression and emotional and behavioral problems in children and adolescents (Cummings et al., 2000; Elgar et al., 2007; Garber & Flynn, 2001; Koblinsky et al., 2006). Thus, studies have shown (a) the association between maternal depression and parenting behaviors, (b) the association between parenting behaviors and child emotional and behavioral problems, and c) the mediating role of parenting behaviors in the association between maternal depression and emotional and child behavioral problems. However, little research has investigated the mediating impact of parenting behaviors on the association between maternal depression and the adolescents' perceptions of family functioning. This type of information is

important if we are to fully understand the correlates of adolescents' negative experiences of family functioning.

The impact of parenting also may depend on moderating variables, such as whether the individual is parenting on their own or in collaboration with a partner. Some studies found that single mothers experience higher levels of depressive symptoms, experience greater inconsistencies in their relationships with their children, and can have children with greater amounts of behavioral problems compared to married or cohabitating mothers (Hilton & Desrochers, 2002; Lara-Cinisomo & Griffin, 2007; Walker & Hennig, 1997). Furthermore, when fathers are absent from the family or exhibit symptoms of psychopathology, this can detract from positive impacts of mothers' parenting on child functioning (Goodman & Gotlib, 1999).

In addition, many studies have focused on maternal depression and parenting behavior among single mothers. Some studies (Dorsey, Forehand, & Brody, 2007; Eamon & Zuehl, 2001) showed that the relation between maternal depression and child functioning for single-parent families was similar to what has been found for two-parent families. However, other studies revealed that environmental factors such as income, employment, and community play a greater role in the impact that maternal depression has on child outcomes among single-parent families, compared to what has been found for two-parent families in prior studies (Brody & Flor, 1997; Jackson & Scheines, 2005; Kotchick, Dorsey, & Heller, 2005; Murry, Bynum, Brody, Willert, & Stephens, 2001). Thus, there is a need for further research exploring the mother's couple relationship status as a moderator of the relation of maternal depression with parenting and child outcomes. Therefore, the present study investigated the extent to which maternal depression is

related to parenting behavior and adolescents' experiences of the family environment among families with partnered versus un-partnered mothers.

Purpose

The current study investigated the relation between maternal depression and the adolescent's perception of family functioning to explore the impact of depression on families. Past research has demonstrated the impact of maternal depression on internalizing and externalizing behaviors of children and adolescents. The purpose of this research was to explore the impacts that maternal depression has on children and adolescents by assessing overall family functioning as experienced by the adolescent. The present study also extended previous research on the link between maternal depression and parenting behaviors. Past research has explored separately how maternal depression is related to parenting behaviors on the one hand, and how forms of parenting behavior are related to child functioning. Such prior research has involved limited exploration of the possible mediating role that parenting styles (authoritarian, authoritative, and permissive) may play in the association between maternal depression and the ways that children and adolescents experience the quality of their families' functioning. The purpose of this research was to examine the relations among these variables and to test whether parenting behaviors play such a mediating role between maternal depression and adolescents' perceptions of family functioning. Finally, the current study investigated the possible moderating effect that mothers' couple relationship status may have on the relation between maternal depression and mothers' parenting behaviors. Past research has explored relationships between marital status and maternal depression, parenting behaviors, and family functioning. Findings from past research suggest that having a

partner with whom one can share parenting responsibilities or from whom one can receive support for one's parenting efforts may decrease the negative impact of depression on constructive parenting behavior. The purpose of this research was to test whether mothers' couple relationship status (`partnered versus un-partnered) moderates the relations between maternal depression and types of parenting behaviors.

The present research tested the following relationships:

- 1. The relation between maternal depression and mothers' parenting behaviors
- 2. The relation between mothers' parenting behaviors and adolescents' perceptions of family functioning
- 3. The relation between maternal depression and adolescents' perceptions of family functioning.
- 4. Whether parenting behaviors mediate the relation between maternal depression and adolescents' perceptions of family functioning.
- 5. Whether mothers' couple relationship status moderates the relation between maternal depression and parenting behaviors.

This research produced findings that can help those in the field of mental health in understanding factors influencing negative impacts of parental depression on adolescents' well-being. Such knowledge can help mental health professionals to intervene in guiding parents in coping successfully with their depression in the family context and minimizing negative effects that their depression can have on their offspring.

Review of Literature

Theoretical Framework

This research was guided by Murray Bowen's family systems theory. Bowen's theory states that the family is an emotional unit that is comprised of a network of relationships (Kerr & Bowen, 1988). Within the framework of Bowen family systems theory (and the broader General Systems Theory as it has been applied to understanding family dynamics), family members function in reciprocal relationship to each other and are therefore influenced by one another. This concept of family systems theory is reflected in the current study insomuch that the variables tested associations between differing family members experiences (i.e., the relation between depression experienced by mothers and family functioning experienced by adolescents). Additionally, Bowen's family systems theory developed from investigating the family process when one family member was diagnosed with schizophrenia (Kerr & Bowen, 1988). Family systems theory is founded on the concept that the "problem", and even a diagnosis, becomes a process that involves the entire family. Family systems theory also states that emotional dysfunction in one member can impact the emotional process of the family or transmit across generations, thus impacting the children in the family (Kerr & Bowen, 1988). These theoretical foundations are reflected in the present study through the exploration of maternal depression's impact on parenting behaviors and adolescents' perceptions of family functioning.

Another concept of family systems theory is the dichotomy of togetherness and individuality that influence the family system. Togetherness reflects an individual or family's ability to participate in meaningful connection with one another (Gehart &

Tuttle, 2003). Individuality refers to a person or family's ability to value the importance of autonomy and support the discovery and maintenance of one's sense of self. It is the goal in family systems theory to balance these two forces in a way that values both the connection with family members and the importance of individuation. Additionally, Bowen family systems theory states that the dynamics of togetherness and individuality are at the core of emotionally significant relationships, such as those within the nuclear family (Kerr & Bowen, 1988). The concept of this duality is reflected in the definition of family functioning in the present study, which is the value placed on and the experience of family cohesion in tandem with the encouragement and support of each individual's feelings, needs, and beliefs.

Overview of Literature on Maternal Depression, Parenting Behaviors, Family Functioning, and Mothers' Couple Relationship Status

Previous research has assessed how maternal depression is associated with a variety of family characteristics. The review of this literature will focus on the associations of these variables. First, the review will address research literature that has examined the association between maternal depression and family functioning. Second, previous studies that investigated the relation between maternal depression and parenting behaviors will be discussed. Third, the review will focus on research that has investigated the association between parenting behaviors and family functioning.

Past research has also investigated the role of mothers' couple relationship status regarding maternal depression, parenting behaviors, and family functioning. The review will address past research that focused only on single mothers and the incidence of depression and family characteristics such as parenting behaviors and family functioning. Past research that compared single mothers to mothers of other relationship statuses with regard to maternal depression, parenting behaviors, and family functioning will also be discussed. Additionally, the review will discuss the implications of these comparison studies with respect to the potential moderating role of mothers' couple relationship status.

Research on Maternal Depression and Family Functioning

Much research has explored the association between maternal depression and family functioning through review of past research, in the context of child and adolescent behavioral outcomes, and in exploring maternal depression and overall family characteristics. In Cummings' (1995) review of studies investigating maternal depression and family functioning, research showed that the presence of maternal depression can increase the probability of family dysfunction. This can occur by the impact that depression has on the marital relationship or on the emotional security of the family. Maternal depression can also exacerbate the maladjustment of children through the disturbance of the family (Cummings, 1995). Cummings (1995) also proposed that resiliency factors such as low-stress environments and coping skills can mediate the relation between maternal depression and family functioning. These variables should be further explored to analyze the contextual factors involved in their associations.

Another review by Chiarello and Orvaschel (1995) assessed research that investigated the family environmental factors involved in the relation between maternal depression and child mood disorders. The review highlighted the importance of exploring how individuals with depression interact with the important people in their lives. Past research showed that families in which one member was depressed often placed less

value on each other's interests and exhibited communication problems (Chiarello & Orvaschel, 1995). These findings suggest that depression and family functioning may have a reciprocal relationship, such that families that have a depressed family member may exhibit greater family dysfunction, and this dysfunction may exacerbate depressive symptomatology.

Several studies have investigated the association between maternal depression and family functioning in the context of child and adolescent outcomes. One such study by Koblinsky et al. (2006) explored the roles of maternal depression, parenting behaviors, and family functioning and their impact on the social skills and behavioral problems of low-income African American pre-schoolers. This study included 184 African American mothers with a child age 42-67 months who was enrolled in a Head Start program. Selfreport measures were modified to be used in a structured interview format (Koblinsky et al., 2006). The study assessed maternal depression through self-reports of depression symptoms using the Center for Epidemiological Studies Depression Scale (CES-D). Parenting behaviors were assessed by the Parenting Dimensions Inventory (PDI) in terms of self-reported use of nurturance, responsiveness, consistency, and control with one's child. Family functioning was defined as the frequency of participation in family routines and the frequency and severity of family conflict. Family functioning was assessed by the mothers' reports regarding these family characteristics using five items from the Family Environment Scale (FES) and eight items from the Family Routines Inventory (FRI).

Results showed that maternal depressive symptoms were significantly related to family conflict. Koblinsky et al. (2006) found that mothers' reports of depression symptoms were positively and significantly correlated with their reports of level of

family conflict. Although this study reported a relation between maternal depression and family functioning, there were some limitations. Given that the study focused on lowincome African American families, the findings are difficult to generalize to other populations. Also, the procedure of the study in administering the self reports through interviews may have influenced the responses given by the participants. Additionally, only a small number of scale items were used to assess family conflict, making it difficult to fully assess a broader interpretation of family functioning. Finally, single-informant reporting from only the mother may have created a bias in the reporting of information.

Another study explored maternal depression and family functioning in the context of child outcomes by investigating the impact of parental depression, marital and family adjustment, parenting behaviors, and children's self control on children's behavioral problems (Gartstein & Fagot, 2003). Participants of the study included 159 dual-parent heterosexual families with one child 5 years in age. Parental depression was measured through parents' self-reports of their own depression symptoms using the CES-D. Family functioning was defined as the ability of family members to adjust to family tension and discord and was assessed through parents' self reports using the Family Events Checklist (FEC). Family functioning was also defined by marital adjustment and was assessed through parents' self reports on the Dyadic Adjustment Scale (DAS), which assessed the dyadic satisfaction and cohesiveness of the marital relationship. Parenting behaviors were assessed through parent-child observations in the home and during structural tasks. Home observations assessed parental coercive behaviors such as physical aggression, verbal criticism, and use of directives during parent-child interactions through the use of the Fagot Interactive Code (Gartstein & Fagot, 2003). Observations of parent-child

interactions during structured problem-solving tasks assessed parental cognitive guidance and instructional behaviors toward their child using Gauvain and Fagot's Problem-Solving Code system.

The results of the study showed that maternal depressive symptoms were significantly related to family functioning, such that greater depressive symptoms related to lower family functioning as reported by mothers (Gartstein & Fagot, 2003). This study supports the concept that maternal depression is associated with family functioning. However, family adjustment was combined with marital adjustment, making it difficult to delineate the associations that involve family functioning. Furthermore, the sample characteristics of a community sample comprised largely of Caucasian, nuclear families makes it difficult to generalize findings across varying family compositions and ethnicities.

Burt et al. (2005) assessed maternal depression and family functioning within the context of child outcomes by investigating the family environment as mediating the relation between parental depression and adolescent internalizing and externalizing behaviors. Participants were an at-risk population (based on level of poverty) of 165 mothers and their children who were assessed at six different periods in time: when the child was 4, 6, 7, 8, 16, and 17.5 years of age. Maternal depression was assessed using two different self-report measures at 4 different periods of time. The CES-D was administered to mothers when their child was 4 and 16 years of age, and the Beck Depression Inventory (BDI) was administered when their child was 7 and 8 years of age. Family functioning was defined as the emotional climate, degree of family participation in developmentally stimulating experiences, and the level of family conflict (Burt et al.,

2005). Parenting behaviors and family functioning were assessed through observations of the family environment in the home when the child was age 6 using the Home Observations for the Measurement of the Environment (HOME) scale. Family functioning, specifically level of conflict was assessed through the mothers' reports when their child was age 16 using the conflict subscale of the Self-report Family Inventory (SFI).

Results of the study showed a significant relation between maternal depression and the current family functioning (level of conflict) when the child was 16 (Burt et al., 2005). These results imply that past and current maternal depression is related to family functioning through the level of family conflict experienced in a family. This study is particularly important in its longitudinal design and its focus on family functioning during the adolescent years. However, the use of an at-risk sample may contain multiple risk factors that may confound results.

Sarigiani et al. (2003) examined maternal depression and family functioning in their assessment of parental and adolescent depressed mood, along with family functioning, during two points in time. Participants included 201 families with an early adolescent child, age 11 to 14 years. Both parental and adolescent depressive symptoms were self-reported by the individual using the CES-D for parents and the Children's Depression Inventory (CDI) for adolescents. The study compared families in which at least one-parent reported a depressed mood at both times of assessment (recurrent parent depression group) with families in which neither parent reported a depressed mood at both assessment periods (contrast group). Participants were part of a larger longitudinal study of mental health and coping of young adolescents. Family functioning was defined

as the level of conflict experienced in the family environment and was assessed through adolescents' reports using the conflict subscale of the FES (Sarigiani et al., 2003). Additionally, the adolescents' emotional experiences associated with events in their daily lives were assessed, in particular, their emotional states in relation to the type of companionship relationships (family, friends, or classmates) in which they were engaging.

Results of the study showed that adolescents whose parents had depression reported greater family conflict (Sarigiani et al., 2003). This study's results are consistent with the system's theory concept that parents' exhibited symptoms of depression impact the level of family functioning. Although the study found that parental depression was related to adolescent perceptions of family conflict, more research needs to be conducted to assess adolescent perceptions of broader types of family functioning, such as family structure and warmth.

The primary focus of these studies that explored the associations of maternal depression and family functioning within the context of child and adolescent behaviors was the relations between maternal depression and child behaviors. It is important to focus research on the association between maternal depression and family characteristics, including family functioning, to explore other ways maternal depression impacts children. One such study by Dickstein et al. (1998) explored the associations of maternal mental illness and contextual risk factors on family and marital functioning over the course of three years. Participants included 182 mothers (of infants and toddlers age 1-4) who were diagnosed with a mental illness. Maternal depression was measured by clinical diagnosis interviews to assess the presence of Major Depressive Disorder (MDD) and the

current severity of depressive symptoms using the Structured Clinical Interview for DSM-III-R Diagnoses (SCID) and the Hamilton Rating Scale for Depression (HRSD). Other factors that were assessed included a clinical global assessment of functioning, clinical assessment of comorbidity, and a multiple risk index that measured a constellation of individual and family factors through interview and self-report that were considered to be risk factors (Dickstein et al., 1998).

Family functioning was defined using the McMaster model of family functioning developed by Epstein, Bishop, and colleagues and was conceptualized along six dimensions: problem solving, communication, roles, affective responsiveness and involvement, and behavioral control (Dickstein et al., 1998). Family functioning was assessed through a structured interview using the McMaster Structural Interview of Family Functioning (McSIFF) and the Clinical Rating Scale (CRS). Family functioning was also assessed through a self-report questionnaire given to mothers using the Family Assessment Device (FAD). Family functioning was also assessed through observations of family interactions during mealtime using the Mealtime Interaction Coding System (MICS). These forms of assessment were based on the McMaster model of family functioning. Other forms of family functioning were assessed through observations of parent-child interactions during mealtime using an adapted version of the Parent/Caregiver Involvement Scale (PCIS) and through self-report questionnaires given to mothers assessing marital satisfaction using the DAS. Results of the study showed that families that had mothers diagnosed with MDD had significant lower levels of family functioning (Dickstein et al., 1998). Additionally, families with mothers exhibiting current depressive symptoms had significantly lower levels of family functioning. This

research showed that families with maternal depression are characterized by unhealthy family functioning across a variety of indices measuring family dynamics.

Another study assessing maternal depression and family characteristics including family functioning, defined as the level of expressiveness and conflict in the family, examined the prevalence, correlates, and persistence of depressive symptoms in mothers of young children (Horwitz et al., 2007). Participants included 1053 biological mothers with infants 1-3.5 years in age that were part of a longitudinal study over the course of a year and a half. Self-report measures were mailed to participants two times (1 year apart). Mothers were asked to report their experience of: depressive symptomatology using the CES-D, the level of expressiveness and conflict in the family using the FES, parenting distress, life events experienced by themselves and their children, quality of social support, quality of existing partnered (married or cohabitating) relationship, financial strain, socio-demographic characteristics, and physical health of their child.

Results from the initial assessment showed that elevated depressive symptoms were significantly associated with high family conflict and low family expressiveness (Horwitz et al., 2007). Results from the follow-up assessment showed that higher family conflict was significantly associated with persistent elevated depressive symptoms. This research further supports the association between maternal depression and family functioning; however, the study's cohort-based sample makes it difficult to generalize these findings to other maternal age groups. Additionally, all of the measures were completed by the mother, increasing the likelihood of respondent bias.

A study conducted by Meyers et al. (2002) furthered the assessment of maternal depression and family functioning through various family characteristics by investigating

how parents' psychological functioning, social relationships, and demographic characteristics related to family functioning. Data was analyzed from a national database assessing child abuse and neglect, and participants were comprised of 96 families assessed as neglectful based on reports from child protective social workers and 101 control families recruited through social programs. All families had at least one child age 5-17 years. The groups were matched on marital status, income, and race and assessments included interviews and observations of the family in addition to questionnaires administered to family caseworkers (Meyers et al., 2002). Maternal depression was assessed by mothers' self-reports of depressive symptoms using the Generalized Contentment Scale (GCS). Family functioning was defined by the Beaver's model of family functioning and was conceptualized along dimensions that included family happiness, affective expressiveness, problem solving, leadership, parental coalitions, level of conflict, and value of autonomy (Meyers et al., 2002). Family functioning, as assessed by the Self-report Family Inventory (SFI), is a questionnaire that was completed by the mothers, and an adapted version of the SFI called the Family Evaluation Measure (FEM) was completed by family case-workers with regards to the family. Family functioning was also assessed through observations of the family during engagement in a structured activity using the Beavers Interactional Competence Scale (BICS).

Results of the study showed that there were no differences between families assessed for neglect and the control families involved in social programs regarding maternal depressive symptoms and family functioning. Consequently, the groups were combined to assess these variables. Maternal depressive symptoms were significantly related to family functioning at all levels. Specifically, higher reports of depressive

symptoms experienced by mothers were related to lower levels of family functioning: as reported by mothers and caseworkers and as observed in family interactions (Meyers et al., 2002). This finding is especially important given the multiple informants used to assess family functioning. However, the only assessment of family functioning given by a family member was the mother. It is possible that the mother's report of the family may be biased due to possible negative cognitions that are associated with depressive symptoms (Meyers et al., 2002). Nevertheless, these reviewed studies provide support for the relation between maternal depression and family functioning. Further research should continue to assess the impact of maternal depression by investigating family functioning, especially during the adolescent years.

Research on Maternal Depression and Parenting Behaviors

Past research that has explored the associations between maternal depression and parenting behaviors has focused mainly on parenting behaviors and parent-child interactions. Reviews of past research on parenting behaviors have concluded that compared to non-depressed mothers, mothers with depression provided lower amounts and lower quality stimulation and were less responsive to their infants (Goodman & Gotlib, 1998). Goodman and Gotlib (1998) also concluded from reviews that depressed mothers make more negative appraisals and have lower tolerance for their school-age children's behavior, compared to non-depressed parents. Cummings et al. (2000) summarized findings that parents who are depressed are more inconsistent, lax, and ineffective in child management and discipline. These parents are also more likely to engage in forceful control strategies. A review of observational and self report studies assessing maternal depression and parenting behaviors concluded that maternal depression was related to negative and disengaged parenting behaviors (Lovejoy, Graczyk, O'Hare, & Neuman, 2000). Mothers' negative parenting behaviors were characterized by hostile or coercive behavior, whereas their disengaged parenting behaviors were characterized by neutral affect and a lack of involvement with their children. Other reviews of past research concluded that depression affects mothers' ability to show firm and consistent discipline with their children and that maternal depression increases the likelihood of parental withdrawal (Elgar, McGrath, Waschbusch, Stewart, & Curtis, 2004).

Other studies have assessed the relation between maternal depression and parenting behaviors by focusing on specific parenting behaviors. Koblinsky et al.'s (2006) study explored the roles of maternal depression, parenting behaviors, and family functioning and their impact on the social skills and behavioral problems of low-income African American pre-school children. Parenting behaviors of mothers were assessed by mothers' reports of their positive parenting behaviors, including nurturance, responsiveness, consistency, and control using the Parenting Dimensions Inventory (PDI). Results of the study showed that maternal depression was significantly related to parenting, such that higher levels of depression symptoms were associated with lower levels of positive parenting behaviors (Koblinsky et al., 2006). This research supports previous studies that have found associations between maternal depression and parenting behaviors. However, the sample population characteristics, along with the possible influences of administering the self reports through interviews on the responses given, may limit the ability to widely generalize the results.

Another study that explored the relation between maternal depression and parenting behaviors examined the contributions of mothers' history of depression, mothers' cognitive style, mothers' parenting behaviors, and stressful life events to depressive cognitions in adolescents (Garber & Flynn, 2001). This longitudinal study assessed 240 young adolescents for four years, beginning in sixth grade and ending in ninth grade. The study also assessed the adolescents' mothers; 155 who were diagnosed with a mood disorder and 55 who exhibited no psychopathology. The researchers screened and assessed for diagnoses of mood disorders in mothers through an initial questionnaire, followed by a semi-structured telephone interview using the SCID. Parenting behaviors were assessed through a questionnaire that measured acceptance/rejection, autonomy/psychological control, and firm/lax control, using the Children's Report of Parenting Behaviors Inventory (CRPBI) and was completed by both mothers and their adolescent child. The study also assessed mothers' self-reports of depressive attributional style, global self-worth, and beliefs of hopelessness by means of questionnaires. Additionally, the occurrence and frequency of major life events were assessed by the mothers' self reports.

Results of the study showed that mothers' depression history was significantly negatively correlated with adolescents' perceptions of parental expression of care and affection toward their child (Garber & Flynn, 2001). Conversely, history of maternal depression was positively correlated with degree of parental rejection, as reported by the adolescent. Results also showed that mothers' history of depression was significantly related to both adolescents' and mothers' perceptions of parental psychological control behaviors. This finding suggests that both adolescent children of mothers with a history

of depression and the mothers themselves reported parental control that was exhibited through indirect psychological means such as guilt induction and withdrawal of love (Garber & Flynn, 2001). This study supports the association between maternal depression and parenting behaviors through the use of multiple informants in assessing parenting behaviors.

Another study assessed the association between maternal depression and parenting behaviors by examining parenting behaviors as mediators between depressive symptoms in mothers and fathers and child adjustment problems (Elgar et al., 2007). Participants included 4,184 parents (92% of whom were mothers) and 6,048 10-15 year old children of the parents. In some cases, more than one child per family participated in the study, resulting in a cluster sample consisting of more children than parents (Elgar et al., 2007). Data from the National Longitudinal Survey of Children and Youth (NLSCY) of Canada were used in the study. Data were collected at two points that were two years apart. Parental depression was assessed through parents' reports of depression symptoms through telephone interviews using the CES-D-12, a 12-item version of the CES-D. Parenting behaviors were assessed by adolescents who were administered a 23-item questionnaire that was part of the NLSCY school questionnaire administered by the teachers. The questionnaire, given during the second data collection period, measured adolescents' perceptions of three parental behaviors: nurturance, rejection, and monitoring. Parental depression and parenting behaviors were analyzed separately for mothers and fathers.

Results of the study showed that maternal depression was significantly related to adolescents' perceptions of parenting behaviors. Specifically, higher levels of maternal

depression during both time periods were negatively correlated with adolescents' perceptions of parental nurturance and positively correlated with parental rejection (Elgar et al., 2007). Higher levels of maternal depression during the initial assessment only were negatively correlated with parental monitoring. These findings suggest that higher levels of maternal depressive symptoms are related to lower levels of parental nurturance and monitoring and higher levels of parental rejection. However, the findings are limited by the fact that adolescents were not instructed as to which parent's behavior was to be assessed, making it difficult to confirm that the parental behaviors assessed by adolescents were those of the participating parent (Elgar et al., 2007). Additionally, the measurement assessing parental behaviors was only moderately reliable.

Other studies that explored the associations between maternal depression and parenting behaviors focused on the parent-child interaction. In Chiarello and Orvaschel's (1995) review of research that investigated the family environmental factors involved in the relation between maternal depression and child mood disorders, they concluded that maternal depression may interfere with a mother's parenting skills by interfering with her ability to relate to her children. They also concluded that depressed mothers often have difficulties interacting with their children because mothers with depression may demonstrate more critical and negative verbal behaviors than mothers without depression. Maternal depression also may be associated with parental withdrawal behavior. Studies assessing maternal depression and the quality of parent-child interaction found that depressed mothers spend less time engaged in activities with their toddler or preschool child (Goodman & Gotlib, 1998). A review of observational and self report studies assessing maternal depression and parenting behaviors concluded that higher levels of

maternal depression were related to lower levels of positive parenting behaviors involving demonstrations of enjoyment or enthusiasm when interacting with their child (Lovejoy et al., 2000).

Dickstein et al.'s (1998) study assessed maternal depression using the SCID and HRSD and parenting behaviors through observations of parent-child interactions during family mealtime using the PCIS. Specifically, the frequency, quality, and appropriateness of parental involvement, characterized by action-oriented involvement and responsiveness, and instrumental interaction, characterized by control, directives, and positive statements, were assessed. Results showed that mothers diagnosed with Major Depressive Disorder (MDD) exhibited poorer quality of involvement when interacting with their children compared to non-depressed mothers (Dickstein et al., 1998). This finding further supports the association between maternal depression and parenting behaviors. Overall, past research supports the relation between maternal depression and parenting behaviors. However, these studies have focused more on families with infants and school-age children than on families with adolescents. More research is needed to explore the relations among these variables in families with adolescents.

Research on Parenting Behaviors and Family Functioning

Research that assesses parenting behaviors typically focuses on child and adolescent outcomes to provide empirical support for the rationale of those parenting behaviors (Baumrind, 1971; 1991). Few studies examine the associations between parenting behaviors and family functioning. One study by Forman and Davies (2003) explored these associations by examining the relations among family instability and adolescent's psychological functioning using family models of children's emotional

security. Participants included 220 young adolescents, 10-15 years of age, and their primary caregivers, 89% of who were mothers. The study was part of a larger project assessing family and adolescent functioning. Parenting behaviors were assessed using the shortened form of the Warmth/Acceptance scale from the Parental Acceptance and Rejection Questionnaire, the Behavioral Control Scale, and the Psychological Control Scale. Questionnaires were completed by the caregiver assessing the caregiver's parenting behaviors and their perceptions of their partner's parenting behaviors. Parenting behaviors were defined as the degree of parental acceptance, behavioral control (monitoring), and psychological control, demonstrated toward the child (Forman & Davies, 2003). Family functioning was defined as the degree of family cohesiveness and stability, as well as the adolescent's experience of security in the family. Family functioning was assessed by two self-report questionnaires. One was completed by the caregiver using the Family Instability Index, in which family instability was conceptualized as the number of times the family experienced disruptive life events over the past five years. The other self-report questionnaire was completed by the adolescent using the Security in the Family System Scale. This scale was comprised of 3 subscales: preoccupation, which assessed worries about the future of the family; security, which assessed the confidence in the family as a reliable source of support; and disengagement, which assessed efforts to disengage from and minimize the significance of the family (Forman & Davies, 2003).

Results of the study showed that family instability was significantly related to parenting difficulties & adolescent appraisals of family insecurity such that greater levels of family instability related to greater levels of parenting difficulties and adolescent

appraisals of family insecurities. Results also showed that parenting difficulties related to adolescent appraisals of family insecurities (Forman & Davies, 2003). These findings suggest that family dysfunction, specifically instability, is related to negative parenting behaviors like low acceptance, low behavioral control, and high psychological control. Additionally, negative parenting behaviors are related to adolescent's perception of insecure family functioning, thus providing support for a reciprocal relation between parenting behaviors. However, the characteristics of the sample population (Caucasian, middle-class) makes it difficult to generalize these findings to broader applications.

Another study explored the associations between parenting behaviors and family functioning through identifications of typologies (Mandara & Murray, 2002). This study focused on 116 African American adolescents 15 years of age and their parents. Participants were part of a larger longitudinal study assessing African American family and child outcomes. Parenting behaviors were assessed by adolescents' report of their parents' parenting behaviors using the Black Family Process Q-Sort (BFPQ). These behaviors were categorized into 3 disciplinary/communication styles similar to Baumrind's (1971) three parenting styles. Authoritative parenting was characterized as being supportive, nurturing, and involved in the adolescent's life. Authoritarian parenting was indicative of controlling or critical parental behaviors. Finally, neglectful parenting was characterized by the degree to which a parent fails to express concern and emotions (Mandara & Murray, 2002). Family functioning was defined along 3 dimensions: relationship – characterized by cohesion, expressiveness, and conflict; personal growth – including emphasis placed on independence and achievement; and systems maintenance - comprised of family organization and control (Mandara & Murray, 2002). Family

functioning was assessed by the adolescent's perceptions using the FES. Other variables of interest included racial socialization, adolescent self-esteem, ethnic identity, and personality, and demographic characteristics assessed by the parent.

Comparisons of parenting behaviors and family functioning resulted in three family typologies: cohesive-authoritative, conflictive-authoritarian, and defensiveneglectful (Mandara & Murray, 2002). Adolescents' reports of parenting behaviors indicative of authoritative parenting was related to the highest overall level of the adolescents' perceptions of family functioning, demonstrated by family cohesion. Authoritarian style parenting behaviors were related to conflictive family functioning marked by chaotic family relationships, a focus on achievement, and parental control. Finally, neglectful parenting behaviors were related to family defensiveness, characterized by low personal growth and development. These findings are important in understanding how parenting styles can be related to adolescents' perceptions of family functioning. However, the findings are limited in their generalizability due to the sample population. More research should explore parenting behaviors and parenting typologies as they relate to family functioning.

Research on the Relations of Mothers' Couple Relationship Status with Maternal Depression, Parenting Behaviors, and Family Functioning

A few studies have investigated the relations that mother's couple relationship status has with maternal depression, parenting behaviors, and child functioning. Some studies that have found that mothers' couple relationship status is associated with these variables suggest the potential for a moderating effect of relationship status.

Research focusing on single mothers only. Kotchick et al. (2005) studied the relation between maternal depression and parenting behaviors in a sample of 123 single-parent African American families with a child between the ages of 7 and 15. Self-report questionnaires were administered to the mothers to assess current depression symptoms using the depression subscale of the Brief Symptom Inventory (BSI). Self-report questionnaires were also administered to mothers to assess three aspects of parenting: (a) warmth and support that mothers experienced in the mother-child relationship using the short form of the Interaction Behavior Questionnaire (IBQ), (b) maternal monitoring, in terms of the mothers' perceptions of their knowledge about various aspects of their child's life, using the Monitoring and Control Questionnaire (MCQ), and (c) discipline consistency using the laxness subscale of the Parenting Scale (Kotchick et al., 2005).

Results of the study showed that higher levels of maternal depression were related to lower levels of mother-child relationship quality and parental monitoring (Kotchick et al., 2005). Maternal depression was not found to be related to parental consistency. The findings suggest that the associations between maternal depression and parenting behaviors are similar for both married and single mothers, based on previous research that assessed that relation among only married mothers. However, the lack of a direct comparison among mothers with differing relationship statuses makes it difficult for these findings to be conclusive when comparing to married mothers.

Dorsey et al. (2007) conducted a longitudinal study examining the relation among conflicts with a primary co-caregiver, maternal depression, and parenting behaviors in a sample of 234 African American single mothers with a child between the ages of 7 and 15. Data were collected at two points 15 months apart. Self-report questionnaires that

were adapted to the culture and socioeconomic demographics of the sample were administered to the mothers. As in the Kotchick et al. (2005) study, the scales assessed maternal depression symptoms using the depression subscale of the BSI, the quality of the mother-child relationship using the IBQ, maternal monitoring using the MCQ, and maternal discipline consistency using the laxness subscale of the Parenting Scale. Other variables of interest in the study included demographic information and the degree of conflict that the mother experienced between herself and the individual she identified as the child's primary co-caregiver.

Similar to the findings of the Kotchick et al. (2005) investigation, Dorsey et al. (2007) reported that higher levels of maternal depression were related to lower levels of mother-child relationship quality and maternal monitoring. This study added to the earlier findings by also finding a significant relation between maternal depression and lower discipline consistency. Finally, the study found that maternal depression mediated the relation between co-caregiver conflict and parenting behaviors, such that higher levels of co-caregiving conflict were associated with higher levels of maternal depression and lower levels of positive parenting (Dorsey et al., 2007). However, the study was limited by its use of a sample of only single mothers, and there is a need for more research directly comparing single parents with those who have partners who share parenting roles.

Potential moderating effects of mother's couple relationship status. The few studies that have investigated how mother's couple relationship status is related to maternal depression, parenting behaviors, and child functioning suggest a potential moderating role of mother's marital status. A study by Lara-Cinisomo and Griffin (2007)

investigated factors associated with major depression among a socioeconomically diverse sample of 1,856 mothers. Maternal depression was measured by a structured interview that assessed both the frequencies of depression symptoms and the probability that the individual met criteria for a DSM diagnosis of a major depressive episode using the short form of the Comprehensive International Diagnosis Interview (CIDI-SF). Marital status was reported by the mothers and was categorized as single, cohabitating, or married. Results of the study showed a significant difference in maternal depression as a function of marital status. Single mothers reported the highest level of depression symptoms compared to cohabitating or married mothers, and married mothers reported the lowest level of depression (Lara-Cinisomo & Griffin, 2007). Single mothers also had significantly higher odds of having major depression compared with married mothers, when controlling for demographic characteristics.

Finally, as noted earlier, a study that attempted to identify typologies of African American families suggested a possible moderating role that marital status may have on parenting behaviors and family functioning (Mandara & Murray, 2002). Results of the study produced three family typologies: cohesive-authoritative, conflictive-authoritarian, and defensive-neglectful. Characteristics of these typologies showed that single mother families often reported parenting behaviors and family functioning indicative of the defensive-neglectful typology: low levels of parental warmth, high levels of parental control, low importance on personal growth and development, and chaotic family structure (Mandara & Murray, 2002). While this research examined parenting behaviors and family functioning, the findings suggest that mother's marital status may play a role in family typologies characterized by parenting behaviors and family functioning. This

finding may be helpful in identifying characteristics of potential at-risk groups. However, this typology is not indicative of all African American single mother families or all single mother families in general. Other family characteristics, including parental education level, employment status, financial resources, and social support should be taken into account. More research should explore the possibility that marital status may have a moderating effect on maternal depression, parenting behaviors, and family functioning. *Summary*

A large body of research that explored the associations between maternal depression and family factors focused primarily on child and adolescent outcomes. Previous research that explored the relations among maternal depression, parenting behaviors, and family functioning focused primarily on how family factors mediate the relation between maternal depression and child outcomes. These studies, along with a few studies investigating maternal depression and family functioning, found that maternal depression is related to lower family functioning, including lower cohesion and higher conflict. These findings support family systems theory in that depression experienced by mothers may influence the entire family. However, the previous studies that focused more on maternal depression and family functioning assessed mothers with infants and toddlers, while fewer studies included mothers with adolescents. Very few studies assessed the adolescents' perception of family functioning to contribute to the concept that family members function in relation to each other. Additionally, much of the past research defined family functioning in narrow terms; e.g., family conflict or cohesiveness. Very few studies assessed overall family functioning to understand the overall impact that maternal depression has on the family. Past research also showed that

maternal depression is related to parenting behaviors; specifically, lower levels of nurturance, involvement, and control and higher levels of rejection, control, and punitive strategies.

There is little past research that focused primarily on the relation between parenting behaviors and adolescents' perception of family functioning. Most studies investigated the effectiveness of different parenting behaviors through the exploration of child and adolescent outcomes (e.g., depression, academic problems). The research that has explored parenting behaviors and family functioning found that parenting behaviors and family functioning have a reciprocal relationship, such that negative parenting behaviors impact family functioning and family dysfunction impacts parenting behaviors, further supporting family systems theory. Little research has explored parenting behaviors as a possible mediator in the relation between maternal depression and adolescents' perception of family functioning

Past research also investigated the role of mother's couple relationship status regarding maternal depression, parenting behaviors, and family functioning. These studies explored how depression, parenting, and family functioning are associated when focusing on specific sub-types of relationship status, such as single-mothers. Similar to results of studies that investigated only married mothers; the past research showed that maternal depression was related to less parental monitoring and inconsistent discipline. Some research that explored the differences in mother's couple relationship status among these variables found that single mothers are more likely to exhibit depressive symptoms, parenting difficulties, and family dysfunction. However, few studies have directly explored the moderating role that mother's couple relationship status may play in the

relation between maternal depression and parenting behaviors. The present study explored the mediating role of parenting behaviors in the relation between maternal depression and the adolescent's view of family functioning and also explored the possible moderating role of mother's couple relationship status.

Definitions of Variables

Independent Variable: Maternal Depression

Depression is a syndrome of symptoms typically characterized by feelings of fatigue, changes in sleeping and eating patterns, loss of interest in daily activities and sex, increased irritability, and feelings of worthlessness and sadness experienced by the individual for at least two weeks (APA, 2000).

Mediating Variable: Parenting Behaviors

Parenting behaviors were defined by the variations in the behavioral characteristics of control, responsiveness, and warmth toward one's child. These parenting behaviors were categorized according to Baumrind's (1971) typologies of parenting styles that make up the authoritarian, permissive, and authoritative parenting styles.

Authoritarian parenting style. This style is comprised of parenting behaviors that focus more on control, somewhat of a focus on parental responsiveness, and less of a focus on parental warmth. Authoritarian parenting is defined as acting in a way that emphasizes compliance, control, physical punishment, and a lack of warmth (Coolahan, 1997).

Permissive parenting style. This style combines parenting behaviors that emphasize parental warmth while placing lesser emphasis on parental control. Emphasis

on parental responsiveness can be ambiguous, such as being responsive to children's emotions, yet being unresponsive to children's needs for structure (Baumrind, 1991). Permissive parenting is defined by actions that demonstrate passivity, lack of control, and lack of parental knowledge (Coolahan, 1997).

Authoritative parenting style. This type of parenting style balances the importance of parental control and warmth while emphasizing parental responsiveness (Baumrind, 1971). Authoritative parenting is defined by actions depicting a balance of warmth, responsiveness, control, and reasoning.

Dependent Variable: Adolescents' Perception of Family Functioning

Family functioning was conceptualized at a broad level as comprised of variations in family competence and family style. Family competence is defined by the level of structure, communication, and flexibility that exists within a family. Family style is defined by the quality of the family interactions: conflict management, expressions of emotions, and attention to the needs of the family members (Beavers & Hampson, 2000). High levels of family functioning were characterized by high levels of cohesion, low levels of conflict, effective communication, appropriate structural boundaries, and direct expressions of warmth toward family members. Low levels of family functioning, or family dysfunction, were characterized by low levels of cohesion, high levels of conflict, confused or ineffective communication, poor structural boundaries (either enmeshed or rigid), and little expressions of warmth.

Moderating Variable: Mother's Couple Relationship Status

Mothers' couple relationship status was defined as the presence or absence of a romantic partner who lives with the mother.

Hypotheses

This study explored the associations among maternal depression, parenting behaviors, adolescents' perception of family functioning, and mothers' couple relationship status (See Figure 1). Past research has shown that current symptoms of depression reported by mothers were related to level of conflict present in families with adolescent children (Burt et al., 2005; Sarigiani et al., 2003). Based on these findings, the researcher hypothesized that:

(1) The higher the level of maternal depression, the more negative the

adolescents' perceptions of family functioning will be.

Past research showed that maternal depression is related to lower levels of nurturance by mothers, as well as their use of more forceful control strategies and ineffective child management (Cummings et al., 2000; Elgar et al., 2007; Garber & Flynn, 2001). Consequently, the researcher hypothesized that:

- (2) Higher levels of maternal depression will be associated with mothers' use of more authoritarian parenting behavior.
- (3) Higher levels of maternal depression will be associated with mothers' use of more permissive parenting behavior.
- (4) Higher levels of maternal depression will be associated with mothers' use of less authoritative parenting behavior.

Past research has found that negative parenting behaviors are related to family dysfunction, whereas positive parenting behaviors are related to more positive family functioning (Forman & Davies, 2003; Mandara & Murray, 2002). Based on these findings, it was hypothesized that:

- (5) Mothers' use of more authoritarian parenting behaviors will be associated with adolescents' perception of less positive family functioning.
- (6) Mothers' use of more permissive parenting behaviors will be associated with adolescents' perception of less positive family functioning.
- (7) Mothers' use of more authoritative parenting behaviors will be associated with adolescents' perception of more positive family functioning.

Little research has investigated the process through which maternal depression is related to family and child functioning. Given the past research that has associated maternal depression with parenting behavior and parenting behavior with family functioning, the researcher hypothesized that:

(8) Parenting behaviors characterized by authoritarian, permissive, and authoritative parenting styles will mediate the relation between maternal depression and adolescents' perceptions of family functioning.

Finally, past research has found that there are variations in the associations among maternal depression, parenting behaviors, and family functioning with respect to mothers' couple relationship status (Lara-Cinisomo & Griffin, 2007; Mandara & Murray, 2002). Given the past research that suggests mother's couple relationship status as a potential moderator (See Fig. 2), the researcher hypothesized that:

- (9) Mother's couple relationship status will moderate the relation between maternal depression and parenting behaviors such that
 - a) The relation between maternal depression and mother's use of authoritarian parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.

- b) The relation between maternal depression and mother's use of permissive parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.
- c) The relation between maternal depression and mother's use of authoritative parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.

Figure 1. Diagram of the Present Study

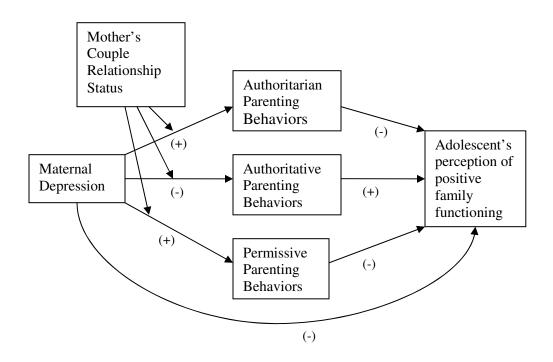
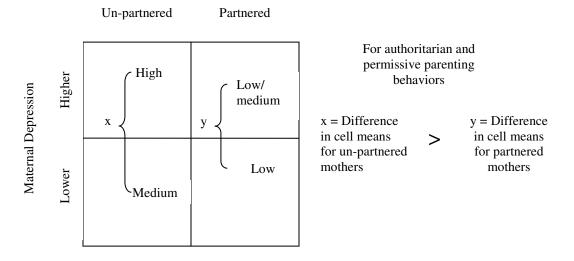
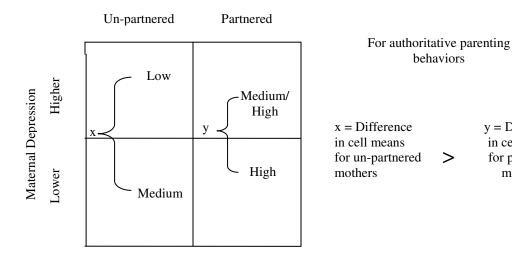


Figure 2. Diagram of the Proposed Cell Means for Interaction between Mothers' Couple Relationship Status and Maternal Depression



Mothers' Couple Relationship Status

Mothers' Couple Relationship Status



y = Difference

in cell means

for partnered

mothers

Chapter 2: Method

Participants

This study involved a secondary analysis of data previously collected from a sample of families who sought family therapy at the Center for Healthy Families, a marriage and family therapy clinic at the University of Maryland, College Park. These families initiated contact with the clinic and attended at least one assessment session with therapists who were advanced graduate students seeking their master's degree in marriage and family therapy. The sample available for the current study included a subset of a larger sample of families who completed the assessment; namely the 105 families that included a mother and adolescents between 11 and 19 years of age. For the purposes of the present study, in families where there was more than one adolescent child the researcher selected one adolescent on the basis of age and gender in order to produce a sample that was diverse on both demographic characteristics. Any cases for which a significant number of responses on the assessment instruments were missing were dropped.

Demographic Information

Mothers. The mean age of the mothers in the sample was 41.5 (SD = 6.47). The ages ranged from 29 to 59. Fifty-seven mothers (54%) were not partnered and 48 mothers (46%) were partnered. Thirty-two percent of mothers were married and 17% were divorced. Table 1 summarizes the frequencies and percentages for the relationship statuses of the mothers in the sample. Mothers in the sample varied in race, with 52% (n = 55) African-Americans and 26% (n = 27) Whites. Table 2 summarizes the different frequencies and percentages for the mothers' race. The mean yearly gross income

reported by mothers (n = 96) was \$33, 988.65 (SD = 23641.92). The income ranged from \$0 to \$160,000. A large majority of the mothers were employed full-time (79%). Twentyfive percent of the mothers in the sample reported that their highest level of education was some high school or a high school diploma, while 75% of the mothers reported that at least some college or trade school training was their highest level of education. The majority of mothers worked in clerical sales (22%) or were professionals with Associates or Bachelors degrees (31%). Table 3 summarizes the different frequencies and percentages for the mothers' education level and occupation. The mean number of people living in the household reported by the mothers in the sample was 3.8 (SD = 1.34) and the number of people living in the household ranged from 2 to 8. The mean number of children living in the home reported by mothers was 2.2 (SD = 1.17). The number of children living in the home ranged from 1 to 6. Thirty-six percent of mothers in the sample (n = 38) reported having 4 people who lived in the household and 2 children who lived in the home.

Relationship Status	Frequency	Percent
Currently married, living together*	34	32.4
Currently married, separated, but not divorced	22	21.0
Divorced, legal action completed	18	17.1
Living together, not married*	14	13.3
Separated, not married	2	1.9
Dating, not living together	2	1.9
Single	11	10.5
Widowed	2	1.9
Domestic Partnership*	0	0

Table 1. Frequencies and Percentages of Relationship Status of Mothers

* denotes relationship status considered to be "partnered".

Race/	Mothers		Adolescents		
Ethnicity	Frequency	Percent	Frequency	Percent	
Native American	1	1.0	1	1.0	
African American	55	52.4	59	56.2	
Asian/Pacific Islander	3	2.9	2	1.9	
Hispanic	9	8.5	6	5.7	
White	27	25.7	20	19.0	
Other or multiracial	10	9.5	17	16.2	

Table 2. Frequencies and Percentages of Race/Ethnicity of Mothers and Adolescents

Table 3. Frequencies and Percentages of Education Level and Occupation of Mothers

Highest Level of Education	Frequency	Percent
Some high school	8	7.6
High school diploma	18	17.1
Some college	30	28.6
Associate degree	10	9.5
Bachelors degree	14	13.3
Some graduate education	5	4.8
Masters degree	8	7.6
Doctoral degree	5	4.8
Trade school	7	6.7
Occupation	Frequency	Percent
Clerical sales/bookkeeper/secretary	23	22.1
Executive/large business owner	1	1.0
Homemaker	11	10.6
Owner/manager of small business	4	3.8
Professional – Associates or Bachelors degree	32	30.8
Professional – Master or Doctoral degree	13	12.5
Skilled worker/craftsman	4	3.8
Service worker – barber/cook/beautician	4	3.8
Semi-skilled worker/machine operator	3	2.9
Unskilled worker	6	5.8
Student	3	2.9

Adolescents. The mean age of adolescents in the sample was 14.7 (SD = 1.78).

The ages ranged from 11 to 19. Fifty-three adolescents (50.5%) were female and 52 adolescents (49.5%) were male. The adolescents in the sample varied in race, with 56%

(n = 59) African-Americans and 19% (n = 20) Whites. Table 2 summarizes the different frequencies and percents for the adolescents' race.

Procedure

Families included in the previously collected sample attended at least one assessment session between the years of 2001 and 2007. During the first family session, therapist interns provided all family members age 13 and older with a packet of several assessment questionnaires to complete. A subset of those instruments will be used in the present study. Some other family members who were between the ages of 11 and 13 were given an abbreviated set of instruments, including a demographic information form, the Beck Depression Inventory (BDI; Beck, Rush, Shaw, & Emery, 1979), and the Beavers Self-report Family Inventory (SFI; Beavers &, Hampson, 1990, 2000). Mothers also completed the Parenting Practices Questionnaire (PPQ; Robinson, Mendeleco, Olsen, & Hart, 1995). Family members completed the questionnaires independently.

When family members' responses to the questionnaires were entered into the data base, for individuals who had some missing data average pro-rated values were calculated for the individual's responses. This was accomplished by totaling the individual's responses to completed items and dividing the sum by the number of responses given, to provide the mean item response value on the scale, which was then used as the value for the missing items.

Measures

Depression

(BDI; Beck et al., 1979). This 21-item inventory (See Appendix A for measure) assesses

the intensity of depression symptoms such as depressed mood, decreased interest in daily activities, fatigue, and feelings of worthlessness that are experienced by the individual. The respondent was asked to rate the intensities of these symptoms by selecting among four response options for each item the one that best describes their experience over the past seven days. For instance, in assessing the depression symptom of feelings of discouragement, the item provides four response options: (0) "I am not particularly discouraged about the future," (1) "I feel discouraged about the future," (2) "I feel I have nothing to look forward to," and (3) "I feel that the future is hopeless and that things cannot improve" (Beck et al., 1979). There are no subscales on the BDI, and the higher the person's total score, the higher the level of depression symptoms. Scores range from 0 to 63.

The BDI has been shown to be internally consistent for both psychiatric and nonpsychiatric populations, with a Cronbach alpha of .86 across several psychiatric samples and .81 across several non-psychiatric samples. The content validity of the BDI is strong, with the items clearly assessing six of the nine criteria for depression that are stated in the fourth edition of the Diagnostic and Statistical Manual (DSM-IV) of mental disorders (APA, 2000). Concurrent validity also has been demonstrated in terms of a significant correlation between BDI scores and clinicians' ratings of depression in psychiatric patients (Beck et al., 1979). Construct validity for the BDI is strong as well, with the measure correlated as predicted with measures of a variety of attitudes and behaviors that are related to depression.

For the purpose of the current study, item 19 was dropped due to missing responses from a large number of participants. Therefore, 20 items on the BDI were used,

with possible scores ranging from 0 to 60. Individuals' responses on the BDI were totaled and used as summary scores for level of depression symptoms. Also, for the purpose of this study in investigating the moderating role of mother's couple relationship status on the relation between depression and parenting behaviors, maternal depression scores were divided into high and low levels based on a median split, which was 10. BDI scores 10 and below were considered to represent low levels of maternal depression, whereas BDI scores above 10 were considered to represent medium to high levels of maternal depression (see Table 4).

Parenting Behaviors

Parenting behaviors were measured with the Parenting Practices Questionnaire (PPQ; Robinson et al., 1995). This 62-item (See Appendix B for measure) self-report scale measured the degree to which a parent reports using authoritarian, permissive, and authoritative styles characterized by Baumrind (1971), with the styles defined in terms of amounts of warmth, responsiveness, and control that parents demonstrate toward their children. Parents are asked to rate how much they demonstrate each type of behavior on each parenting style subscale on a 5-point Likert-type scale, ranging from (1) "never" to (5) "always." There are 20 items that constitute the authoritarian parenting scale (e.g., "I guide my children by punishment more than reason" and "I yell or shout when my children misbehave"), 15 items that make up the permissive parenting scale (e.g., "I find it difficult to discipline my children" and "I spoil my children"), and 27 items on the PPQ that comprise the authoritative parenting scale (e.g., "I give comfort and understanding when my kids are upset" and "I give my children reasons why rules should be obeyed") (Robinson et al., 1995). Three items on the permissive parenting subscale were reversecoded because they were worded such that agreement indicated less permissive parenting. Scores on the authoritarian subscale range from 20 to 100, scores on the permissive subscale range from 15 to 75, and scores on the authoritative subscale range from 27 to 135.

The PPQ has been shown to be internally consistent, with the authoritative, permissive, and authoritarian parenting subscales having Cronbach alphas of 0.87, 0.77, and 0.74, respectively (Coolahan, 1997). The PPQ also has strong concurrent and construct validity; for example with high correlations between the subscales and observed parenting behaviors (Robinson et al., 1995). For the purpose of this study, item 47 was dropped from the authoritarian subscale due to missing responses from a large number of participants. The total number of items on the authoritarian subscale for this study is 19, with scores ranging from 19 to 95. Individuals' responses on each subscale of the PPQ were totaled and used as summary scores for the 3 parenting styles (permissive, authoritative, and authoritarian). (see Table 4).

Adolescent's Perception of Positive Family Functioning

The adolescent's perception of positive family functioning was measured with the Beavers Self-report Family Inventory (SFI; Beavers & Hampson, 1990, 2000). The SFI is a 36-item (See Appendix C for measure) self-report measure that assesses five family domains: health/competence (e.g., "The future looks good to our family"), conflict (e.g., "Grownups in this family compete and fight with each other"), cohesion (e.g., "Our happiest times are at home"), leadership (e.g., "The grownups in this family are strong leaders") and emotional expressiveness (e.g., "Family members pay attention to each other's feelings") (Beavers & Hampson, 1990, 2000). Individuals were asked to rate how

well a statement fits their family, on a 5-point Likert-type scale, with 1 corresponding to "fits our family very well" and 5 corresponding to "does not fit our family at all". The higher the total score on each subscale, the higher the level of family dysfunction. Scores for the SFI range from 19 to 95 for the health/competency subscale, 5 to 25 for the cohesion subscale, 12 to 60 for the conflict subscale, 3 to 15 for the leadership subscale, and 5 to 25 for the expressiveness subscale.

Reliability of the SFI has been demonstrated in prior studies, with its internal consistency as a whole assessed at a Cronbach alpha of between .84 and .88, and its average test-retest reliability over a 30-90 day period assessed at .85. The SFI also shows strong concurrent validity, exhibiting a canonical correlation of .62 between the SFI and the observer-rated Beavers Interactional Competence Scale. The SFI demonstrated clinical validity in discriminating between groups of psychiatric patients with a variety of diagnoses. For example, response scores from family members with schizophrenia fell within the severely dysfunctional family functioning range of the Beavers Model, while scores from family members with borderline personality disorder fell within the borderline family functioning range (Beavers & Hampson, 2000).

For the purpose of this study, each adolescent's total SFI score was used to measure his or her overall perception of family functioning. This was created by dropping items which imply dual parent families ("The grownups in this family understand and agree on family decisions") because adolescents may be assessing their single-parent family. The total number of items on the scale was 29, with scores ranging from 29 to 145. Additionally, the questionnaire was reverse coded so that higher total scores signify

more positive family functioning. The overall SFI scale for adolescents' responses produced a Cronbach alpha of .92 in the present sample.

Because two different versions of the SFI were used in the Center for Healthy Families over the course of data collection, responses that were given using the older version of the assessment, which used a 3-point Likert-type scale for all but one item, were re-coded. A response of 1 ("fits our family very well") on the old version remained the same; a response of 2 ("fits our family some") on the old version was re-coded as a 3 to match the response code used on the revised version; and a response of 3 ("does not fit our family") on the old version was re-coded as a 5 to match the response code used on the revised addition. The one item that assessed overall family cohesion used a 10-point Likert-type scale on the old version, compared to a 5-point Likert-type scale on the revised version. Therefore, this item was recoded as follows: a response of 1 or 2 on the old version was re-coded as a 1 to match the revised version, a response of 3 or 4 on the old version was re-coded as a 2, a response of 5 or 6 was recoded as a 3, a response of 7 or 8 was re-coded as a 4, and a response of 9 or 10 was recoded as a 5. Items that were present on the old version but not on the new version of the SFI were dropped (8 items total). One item was present on the revised version and not the old version (assessing overall family functioning) and was also dropped. (see Table 4).

Mother's Couple Relationship Status

Mother's couple relationship status was measured by a self-report information questionnaire (See Appendix D for measure) that includes both multiple choice and continuous (fill in-the-blank) response options. Item 9 was used to assess relationship status. Participants chose 1 of 9 different options that best described their relationship

status. For the purpose of this study, these response options were collapsed to distinguish mothers who lived with their romantic partner from mothers who did not live with their romantic partner or were single. Mother's couple relationship status was coded by a "1" corresponding to un-partnered and "2" corresponding to partnered. Gender of the participant was coded by a "0" corresponding to female and "1" corresponding to male in the existing data base (see Table 4).

Variable	Conceptual Definition	Operational Definition	Tool of Measurement
Independent Vari	able		
Maternal Depression	Characterized by feelings of fatigue, changes in sleeping & eating patterns, loss of interest in daily activities and sex, increased irritability, & feelings of worthlessness & sadness experienced by the individual for at least two weeks (APA, 2000).	Intensity of depressive symptoms defined on the <i>Beck Depression</i> <i>Inventory</i> developed by Beck, Rush, Shaw, & Emery, 1979.	Beck Depression Inventory (BDI) items: 1-18, 20 & 21
-	ble: Parenting Behaviors		
Authoritarian Parenting	Parenting behaviors that focus more on control, with somewhat of a focus on parental responsiveness, and less of a focus on parental warmth. Defined as acting in a way that emphasizes compliance, control, physical punishment, and a lack of warmth. (Baumrind, 1971)	Parenting behaviors defined on the <i>Parenting Practices</i> <i>Questionnaire</i> developed by Robinson et al., 1995.	Parenting Practices Questionnaire (PPQ) Authoritarian items: 2, 6, 10, 13, 17, 19, 23, 26, 28, 32, 37, 40, 43, 44, 50, 54, 56, 59, & 61
Permissive Parenting	Parenting behaviors that emphasize parental warmth while placing lesser emphasis on parental control. Emphasis on parental responsiveness can be ambiguous, such as being responsive to children's emotions, yet being unresponsive to children's needs for structure (Baumrind, 1971).	Parenting behaviors defined on the <i>Parenting Practices</i> <i>Questionnaire</i> developed by Robinson et al., 1995.	Parenting Practices Questionnaire (PPQ) Permissive items: 4, 8, 11, 15, 20, 24, 30, 34, 36, 38, 41, 45, 49, 52, & 57

Table 4. Definitions of Variables and Tools of Measurements

Variable	Conceptual Definition	Operational Definition	Tool of Measurement		
Mediating Variab	Mediating Variable: Parenting Behaviors				
Authoritative Parenting	Parenting behaviors that balance the importance of parental control and warmth while emphasizing parental responsiveness. Defined by actions that demonstrate passivity, lack of control, and lack of parental knowledge (Baumrind, 1971).	Parenting behaviors defined on the <i>Parenting Practices</i> <i>Questionnaire</i> developed by Robinson et al., 1995.	Parenting Practices Questionnaire (PPQ) Authoritative items: 1, 3, 5, 7, 9, 12, 14, 16, 18, 21, 22, 25, 27, 29, 31, 33, 35, 39, 42, 46, 48, 51, 53, 55, 58, 60, & 62.		
<u> </u>	ble: Adolescents' Perception of Pos				
Family Functioning	Variations in family competence and family style comprise family functioning. Family competence is defined by the level of structure, communication, and flexibility that exists within a family. Family style is defined by the quality of the family interactions: conflict management, expressions of emotions, and attention to the needs of the family members (Beavers & Hampson, 2000).	Family functioning defined on the <i>Self-</i> <i>report Family</i> <i>Inventory</i> developed by Beavers & Hampson, 1990.	<i>Self-report Family</i> <i>Inventory (SFI)</i> items: 1, 2, 3, 6, 7, 9-15, 17- 23, 25-31, 33, 34, & 36.		
Moderating Varia	Moderating Variable: Mothers' Couple Relationship Status				
Couple Relationship Status	Characterized as the presence or absence of a mother's romantic partner who lives in the same household with the mother and adolescent child.	Relationship Status defined on the Family/Individual Information & Instructions Questionnaire (CHF, 2005).	Family/Individual Information & Instructions Questionnaire item 9. Responses 1, 4, & 9 correspond to partnered; responses 2, 3, & 5-8 correspond to not partnered.		

Chapter 3: Results

Overview of Analyses

Hypotheses 1 through 7, restated below, were tested with one-tailed Pearson's correlations due to the directional nature of the hypotheses. For hypothesis 1, the independent variable was the degree of maternal depression and the dependent variable was the degree of adolescents' perceptions of family functioning. For hypotheses 2 through 4, the independent variable was the degree of each type of parenting behavior (authoritarian, permissive, and authoritative). For hypotheses 5 through 7, the independent variable was the degree of each type of parenting behavior, and authoritative) and the dependent variable was the degree of adolescents' perceptions of family functioning. A correlation was determined significant at the .05 level. Hypothesis 8, which examined the degree to which parenting behaviors mediated the relation between maternal depression and adolescents' perceptions of family functioning, was to be tested by using partial correlations controlling for the types of parenting behavior.

Hypotheses 9a, b, and c, which examined the degree to which mothers' couple relationship status moderated the relation between maternal depression and parenting behaviors, were tested with multiple regression analyses. In each analysis, the predictor variables were the mother's couple relationship status (partnered or unpartnered), the degree of maternal depression, and the interaction of the mothers' couple relationship status and the degree of maternal depression. The interaction variable, created by multiplying maternal depression scores with mother's couple relationship status scores,

provided the test of the moderation hypothesis. The multiple regression analysis was run three times, once for each of the three types of parenting behaviors (authoritarian, permissive, and authoritative).

Test of the Hypotheses

Hypothesis 1: The higher the level of maternal depression, the more negative the adolescents' perceptions of family functioning will be.

A one-tailed Pearson correlation was used to test the direction and strength of the association between maternal depression and adolescents' perceptions of family functioning. The Beck Depression Inventory (BDI) was used to measure maternal depression and the Beaver's Self-report Family Inventory (SFI) was used to measure adolescents' perceptions of family functioning. The correlation between mothers' BDI scores and adolescents' SFI scores was -.09 and was not significant. Therefore, the results did not support the hypothesis.

Hypothesis 2: Higher levels of maternal depression will be associated with mothers' use of more authoritarian parenting behavior.

A one-tailed Pearson correlation was used to test the direction and strength of the association between maternal depression and mothers' use of authoritarian parenting behavior. The authoritarian subscale of the Parenting Practices Questionnaire (PPQ) was used to measure authoritarian parenting behavior. The correlation between mothers' BDI and scores and mothers' scores on the authoritarian subscale of the PPQ was .17 and significant (p = .04), consistent with the hypothesis.

Hypothesis 3: Higher levels of maternal depression will be associated with mothers' use of more permissive parenting behavior.

A one-tailed Pearson correlation was used to test the direction and strength of the association between maternal depression and mothers' use of permissive parenting behavior. The permissive subscale of the Parenting Practices Questionnaire (PPQ) was used to measure permissive parenting behavior. The correlation between mothers' BDI and scores and mothers' scores on the permissive subscale of the PPQ was .33 and significant (p < .001), consistent with the hypothesis.

Hypothesis 4: Higher levels of maternal depression will be associated with mothers' use of less authoritative parenting behavior.

A one-tailed Pearson correlation was used to test the direction and strength of the association between maternal depression and mothers' use of authoritative parenting behavior. The authoritative subscale of the Parenting Practices Questionnaire (PPQ) was used to measure authoritative parenting behavior. The correlation between mothers' BDI and scores and mothers' scores on the authoritative subscale of the PPQ was -.02 and was not significant. Therefore, hypothesis 4 was not supported. Table 5 summarizes the results for hypotheses 2-4.

 Table 5. Means, Standard Deviations, and Correlations of Maternal Depression,

 Parenting Behaviors, and Adolescents' Perceptions of Family Functioning

Variable	Μ	SD	1.	2.	3.	4.
1. Maternal depression	13.02	9.55	-	-	-	-
2. Adolescents' perceptions of family functioning	93.88	23.37	091	-	-	-
3. Authoritarian parenting behaviors	43.62	12.01	.169*	343**	-	-
4. Permissive parenting behaviors	33.50	7.51	.330**	247**	.404**	-
5. Authoritative parenting behaviors	103.96	15.44	024	.304**	479**	339**

Note: Correlations that were tests of hypotheses are italicized.

* Correlation is significant at the .05 level (1-tailed).

** Correlation is significant at the .01 level (1-tailed).

Hypothesis 5: Mothers' use of more authoritarian parenting behaviors will be associated with adolescents' perception of less positive family functioning.

A one-tailed Pearson correlation was used to test the direction and strength of association between mothers' use of authoritarian parenting behaviors and adolescents' perception of family functioning. The correlation between mothers' scores on the authoritarian subscale of the PPQ and adolescents' SFI scores was -.34 and significant (p < .001), consistent with the hypothesis.

Hypothesis 6: Mothers' use of more permissive parenting behaviors will be associated with adolescents' perception of less positive family functioning.

A one-tailed Pearson correlation was used to test the direction and strength of association between mothers' use of permissive parenting behaviors and adolescents' perception of family functioning. The correlation between mothers' scores on the permissive subscale of the PPQ and adolescents' SFI scores was -.25 and significant (p = .006), consistent with the hypothesis.

Hypothesis 7: Mothers' use of more authoritative parenting behaviors will be associated with adolescents' perception of more positive family functioning.

A one-tailed Pearson correlation was used to test the direction and strength of association between mothers' use of authoritative parenting behaviors and adolescents' perception of family functioning. The correlation between mothers' scores on the authoritative subscale of the PPQ and adolescents' SFI scores was .30 and significant (p = .001), consistent with the hypothesis. Table 5 summarizes the results for hypotheses 5 through 7.

Hypothesis 8: Parenting behaviors characterized by authoritarian, permissive, and authoritative parenting styles will mediate the relation between maternal depression and adolescents' perceptions of family functioning.

Hypothesis 8 was not tested because no significant relation was found between maternal depression and adolescents' perceptions of family functioning. There was no relation for parenting behaviors to mediate.

Hypothesis 9: Mother's couple relationship status will moderate the relation between maternal depression and parenting behaviors such that

a. The relation between maternal depression and mothers' use of authoritarian parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.

A multiple regression analysis was used to predict mothers' use of authoritarian parenting behaviors from degree of maternal depression, mother's couple relationship status, and their interaction, with the predictor variables entered into the regression model simultaneously. The overall model was not significant: R = .20, $R^2 =$.04, F(3, 101) = 1.46, p = .23. Therefore, the interaction of maternal depression and mother's couple relationship status did not predict mothers' authoritarian parenting behaviors, and there was no evidence that relationship status moderated the relation between maternal depression and authoritarian parenting.

b. The relation between maternal depression and mothers' use of permissive parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered. A multiple regression analysis was used to predict mothers' use of permissive parenting behaviors from degree of maternal depression, mother's couple relationship status, and their interaction, with the predictor variables entered into the regression model simultaneously. The overall model was significant: R = .35, $R^2 = .12$, F(3, 101) = 4.64, p= .004. The degree of maternal depression was a significant predictor of permissive parenting behavior ($\beta = .65$, p = .032). The interaction between maternal depression and mother's couple relationship status was not significant in the regression model ($\beta = .32$, p = .28). This finding did not support the hypothesis that mother's couple relationship status would moderate the relation between maternal depression and permissive parenting behaviors.

However, there was a significant Pearson correlation of .27 (p = .003)between the maternal depression by relationship status interaction term and permissive parenting behaviors. Therefore, it was decided to explore this interaction pattern further. In order to investigate the pattern of interaction, cell means for permissive parenting behaviors as a function of both maternal depression level and mother's couple relationship status were calculated. Maternal depression scores were divided into higher and lower levels based on a median split. Then a 2 X 2 table of permissive parenting means was calculated for higher versus lower maternal depression and mother's partnered versus unpartnered couple relationship status. These cell means are reported in Table 6. The results show that there was a trend for unpartnered mothers to exhibit a greater difference in permissive parenting for higher versus lower levels of maternal depression than do partnered mothers. This pattern is consistent with the hypothesis that

the relation between maternal depression and use of permissive parenting will be stronger

when mothers are unpartnered.

Table 6. Cell Means for Permissive Parenting for the Interaction between Mother'sCouple Relationship Status and Maternal Depression

Unpartnered	Partnered
35.76	(35.22
5.91	$3.09 \prec$
29.85	32.13
4	5.91

Mother's Couple Relationship Status

c. The relation between maternal depression and mothers' use of authoritative parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.

A multiple regression analysis was used to predict mothers' use of authoritative parenting behaviors from degree of maternal depression, mother's couple relationship status, and their interaction, with the predictor variables entered into the regression model simultaneously. The overall model was not significant: R = .18, $R^2 =$.03, F(3, 101) = 1.25, p = .34. Thus, the relationship status by depression interaction did not account for variance in mothers' use of authoritative parenting behaviors, and the finding did not support the hypothesis. Table 7 summarizes the statistical tests and results for all hypotheses.

Hypothesis	Statistical	Results
M	Analysis	
Maternal depression and adolescents' perceptions of fan		
Hyp. 1: The higher the level of maternal depression,	One-tailed	Hypothesis not supported;
the more negative the adolescents' perceptions of	Pearson	correlation of09 not
family functioning will be.	correlation	significant.
Maternal depression and parenting behaviors	0 111	TT .1 · . 1
Hyp. 2: Higher levels of maternal depression will be	One-tailed	Hypothesis supported;
associated with mothers' use of more authoritarian	Pearson correlation	correlation of .17 significant at the $p = .04$ level.
parenting behavior. Hyp. 3: Higher levels of maternal depression will be	One-tailed	Hypothesis supported;
associated with mothers' use of more permissive	Pearson	correlation of .33 significant
parenting behavior.	correlation	at the $p < .001$ level
Hyp. 4: Higher levels of maternal depression will be	One-tailed	Hypothesis not supported;
associated with mothers' use of less authoritative	Pearson	correlation of02 not
parenting behavior.	correlation	significant.
Parenting behaviors and adolescents' perceptions of fam		Significant.
		I for a the asian and a state
Hyp. 5: Mothers' use of more authoritarian parenting behaviors will be associated with adolescents'	One-tailed Pearson	Hypothesis supported;
	correlation	correlation of 34
perception of less positive family functioning.		significant at the <i>p</i> < .001 level.
Hyp. 6: Mothers' use of more permissive parenting	One-tailed	Hypothesis supported;
behaviors will be associated with adolescents'	Pearson	correlation of25
perception of less positive family functioning.	correlation	significant at the $p = .006$ level.
Hyp. 7: Mothers' use of more authoritative parenting	One-tailed	Hypothesis supported;
behaviors will be associated with adolescents'	Pearson	correlation of .30 significant
perception of more positive family functioning.	correlation	at the $p = .001$ level.
Mediating role of parenting behaviors		
Hyp. 8: Parenting behaviors characterized by	Partial	Hypothesis not supported;
authoritarian, permissive, and authoritative parenting	correlations	no relation to mediate (see
styles will mediate the relation between maternal		results of Hypothesis 1).
depression and adolescents' perceptions of family		
functioning.		
Moderating role of mother's couple relationship status	N 1: 1	
Hyp. 9a: Mother's couple relationship status will	Multiple	Hypothesis not supported;
moderate the relation between maternal depression and authoritarian parenting behaviors such that the relation	regression analysis	overall model of: $R = .20$,
between maternal depression and mothers' use of	anarysis	$R^2 = .04, F(3, 101) = 1.46$
authoritarian parenting behaviors will be stronger when		not significant.
mother's couple relationship status is unpartnered		
compared to partnered.		

Table 7. Summary of Hypotheses, Statistical Analyses, and Results

Hypothesis	Statistical Analysis	Results
Moderating role of mother's couple relationship status		
Hyp. 9b: Mother's couple relationship status will moderate the relation between maternal depression and permissive parenting behaviors such that the relation between maternal depression and mothers' use of permissive parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.	Multiple regression analysis	Hypothesis not supported; interaction between maternal depression & mother's relationship status ($\beta = .32, p = .28$) not significant in the regression model. A follow-up Pearson correlation between interaction term and permissive parenting was significant, and cell means for 2 X 2 levels of relationship status and depression were consistent with the hypothesis.
Hyp. 9c: Mother's couple relationship status will moderate the relation between maternal depression and authoritative parenting behaviors such that the relation between maternal depression and mothers' use of authoritative parenting behaviors will be stronger when mother's couple relationship status is unpartnered compared to partnered.	Multiple regression analysis	Hypothesis not supported; overall model of $R = .18$, $R^2 = .03$, $F(3, 101) = 1.25$ not significant.

Exploratory Analyses

Exploratory analyses were conducted to investigate (a) the relations among the three types of parenting behavior, and (b) whether one type of parenting behavior is stronger than another in accounting for variance in adolescents' perceptions of family functioning. First, the Pearson correlations among the three types of parenting, which are presented in Table 4.1, indicate significant correlations among them. The correlation between authoritarian and permissive forms of parenting was .40 (p < .001), indicating that these two forms of problematic parenting tend to co-occur. The correlations between authoritative parenting and authoritarian and permissive forms of parenting were -.48 (p < .001) and -.34 (p < .001), respectively.

To test the relative associations of the three forms of parenting behavior with adolescents' perceptions of family functioning, mothers' scores on the three types of parenting behavior (authoritarian, permissive, and authoritative) were entered simultaneously into a multiple regression analysis to assess their relative contributions to predicting adolescents' perceptions of family functioning. The overall model was significant: R = .39, $R^2 = .15$, F(3, 101) = 5.99, p = .001. Authoritarian parenting behaviors were found to be the only significant predictor of adolescents' perceptions of family functioning within that model ($\beta = -.22$, p = .04). Permissive parenting and authoritative parenting did not add significantly to the statistical prediction of adolescents' perceptions of family functioning ($\beta = -.10$, p = .325 and $\beta = .16$, p = .13).

A step-wise inclusion multiple regression analysis was also conducted to assess each parenting behaviors' variance in predicting adolescents' perceptions of family functioning. The overall model was significant: R = .34, $R^2 = .12$, F(1, 103) = 13.73, p =.001, with only authoritarian parenting behaviors accounting for a significant amount of variance in family functioning ($\beta = -.34$, p = .001). However, although the other parenting styles did not enter the stepwise analysis at the p < .05 level, a trend was found for authoritative parenting behaviors to account for some variance in adolescents' perceptions of family functioning. A partial correlation between authoritative parenting behaviors and adolescents' perceptions of family functioning of .17 (p = .086) was found. Permissive parenting behaviors did not account for a significant portion of variance in adolescents' perceptions of family functioning, with a partial correlation of -.13 (p = .20).

Chapter 4: Discussion

Summary of Findings

The findings from the present study did not support the hypothesis that the higher the level of maternal depression, the more negative the adolescents' perception of family functioning would be. This is inconsistent with previous findings exploring the association between maternal depression and aspects of family functioning (Dickstein et al., 1998; Garstein & Fagot, 2003; Horwitz et al., 2007; Koblinsky et al., 2006). However, unlike the present study, this past research assessed family functioning through self-report from the mothers or by observations, not from adolescents' self-reports. Additionally, the past research did not assess overall family functioning, but specific characteristics such as family conflict, family maladjustment and discord, or family expressiveness.

For example, one study found that adolescents who had at least one parent with recurrent depression reported greater family conflict than adolescents whose parents were not depressed (Sarigiani et al., 2003). This study was a longitudinal design which assessed the participants over a period of three years, compared to the current study, which was a cross-sectional case-control design which assessed mothers and adolescents at a single point in time. The difference in research design may explain why the findings from the present study do not support findings from previous research. Additionally, the study by Sarigiani et al. (2003) assessed depression in both mothers and fathers, but did not distinguish between parental roles when analyzing the main effect for recurrent parental depression on adolescents' reports of family conflict. The findings of that study may be due to either maternal depression or paternal depression, or both. Therefore, the

findings from the present study do not support findings from this previous research partly because the current study focused solely on maternal depression. Finally, the previous study assessed family conflict, while the present study explored overall family functioning, including family conflict. It is possible that investigating a specific characteristic of family functioning, such as family conflict, may provide more variation, making it more likely to find a significant main effect from parental depression. The present study assessed family functioning using a global measure, which may have limited the variance in family functioning.

Finally, the past studies used samples of families comprised of infants and toddlers up to children who were 5 years of age. Thus, the use of different informants, different measurements of family functioning, and assessment of families with children of different ages may account for the inconsistency between findings of previous research and those from the present study.

However, two previous studies assessing maternal depression and family functioning (Burt et al., 2005; Meyers et al., 2002) measured family functioning using the Beavers model and Beavers Self-report Family Inventory (SFI), similar to the present study. These studies found an association between maternal depression and family functioning as well. However, in these previous studies, family functioning was reported by mothers, third party mental health professionals, or by observers, rather than adolescents themselves. Also, Burt et al. (2005) explored family conflict only using the conflict subscale of the SFI, whereas the present study assessed overall family functioning using total scores of the SFI. Use of the total scores of the SFI in the present study, rather than using the pre-constructed subscales, may have limited the measure's

ability to accurately assess family functioning as defined by the Beavers model. This may explain the difference in the findings of the present study compared to other studies that used the SFI.

The research by Meyers et al. (2002) assessed families in which physical, emotional, medical, or educational neglect was reported and families that participated in employment preparation programs. Thus, the sample of families in this study may have been more at risk than the families in the current study. Similarly, the families assessed by Meyers et al. (2002) may have been more likely to experience both depression and family dysfunction given their low socioeconomic status and involvement with child protective services. Regardless of the similar measurement used to assess family functioning, differences in findings between Burt et al. (2005), Meyers et al. (2002), and the present study may be due to differences in the individual who assessed family functioning, the differences in items used on the SFI, and differences in the socioeconomic status and history of neglect in the families. Overall, the findings from the present study did not reflect findings from previous research investigating the association between maternal depression and family functioning.

The present study also tested the relation between maternal depression and parenting behaviors. Findings from the present study supported the hypotheses that higher levels of maternal depression would be associated with mothers' use of more authoritarian and permissive parenting behaviors. However, findings did not support the hypothesis that higher levels of maternal depression would be associated with mothers' use of less authoritative parenting behaviors. In other words, the present study found that maternal depression was not associated with less use of authoritative parenting, but was

associated with more use of authoritarian and permissive parenting behaviors. This supports previous studies that found that maternal depression is associated with forceful control strategies and lower levels of nurturance characteristic of authoritarian parenting behaviors (Cummings et al., 2000; Elgar et al., 2007; Koblinsky et al., 2006; Lovejoy et al., 2000). Findings from the present study also support previous research that found an association between maternal depression and inconsistencies in parental discipline characteristic of permissive parenting behaviors (Cummings et al., 2000; Koblinsky et al., 2006).

The present study did not find an association between maternal depression and authoritative parenting behaviors. This is contradictory to past research, which found that maternal depression is associated with lower levels of authoritative parenting behaviors such as reasoning, responsiveness, and acceptance (Cummings et al., 2000; Elgar et al., 2007). Findings from the present study regarding authoritative parenting may not support previous findings due to the difference in measurements used to assess parenting behaviors. The Parenting Practices Questionnaire (PPQ) measures degrees of parenting behaviors and does not assess for a definitive parenting style. Therefore, it is possible for findings to show that parents may exhibit some behaviors of all three parenting styles. However, previous studies have shown that maternal depression is associated with inconsistent parenting (Cummings et al., 2000), which implies that mothers with depression may not adhere to a single typology of parenting behaviors, but may be inconsistent in their parenting. Therefore, mothers with depression may not exhibit less authoritative parenting behaviors, but may rather exhibit more inconsistencies in their overall parenting behaviors.

The present study also explored the association between parenting behaviors and adolescents' perceptions of family functioning. Findings supported the hypotheses that mothers' use of more authoritarian and permissive parenting behaviors would be associated with adolescents' perceptions of less positive family functioning, while mothers' use of more authoritative parenting behaviors would be associated with adolescents' perceptions of more positive family functioning. These findings support previous research in which parenting behaviors, such as parental rejection and low behavioral control, were associated with adolescents' appraisals of family insecurity, such as worries regarding the family's future and lack of confidence in the family as a support system (Forman & Davies, 2003). Findings from the present study also support those from previous research indicating that authoritative parenting behaviors are associated with adolescents' perceptions of aspects of positive family functioning, such as family cohesion, emphasis on personal growth and autonomy, and low levels of familial conflict (Mandara & Murray, 2002). Similarly, findings from the present study also support those from previous research indicating that authoritarian parenting behaviors are associated with adolescents' perceptions of negative family functioning, characterized by high levels of conflict, distress, and lack of encouragement of affective expression (Mandara & Murray, 2002).

The present study also investigated a possible process through which the previously found link between maternal depression and problems in family functioning may occur. However, the hypothesis that parenting behaviors characterized by authoritarian, permissive, and authoritative parenting styles would mediate the relation between maternal depression and adolescents' perceptions of family functioning was not

directly supported because no association between maternal depression and family functioning was found in the first place. However, maternal depression was found to be associated with authoritarian and permissive parenting behaviors (hypotheses 2 and 3), and authoritarian and permissive parenting behaviors were found to be associated with adolescents' perceptions of family functioning (hypotheses 5 and 6). Based on this support, authoritarian and permissive parenting behaviors may indirectly mediate the relation between maternal depression and adolescents' perceptions of family functioning through these separate associations. Although there has been limited research exploring the potential mediating role that parenting behaviors have in the relation between maternal depression and adolescents' perceptions of family functioning per se, past research has found that parenting behaviors (i.e., nurturance and parental rejection) mediate the relation between maternal depression and other types of adolescent outcomes such as emotional and behavioral problems (Burt et al., 2005; Elgar et al., 2007). Given the lack of direct evidence of mediation in the present study, the mediating role that parenting behaviors may have in the relation between maternal depression and family functioning remains unresolved and requires further investigation.

Results of the present study have some interesting implications regarding the relations among maternal depression, parenting behaviors, and family functioning. First, the results suggest that adolescents' perceptions about family functioning may be influenced more by their mothers' behaviors toward them (i.e., parenting behaviors) than by the factors that affect their mothers' parenting behavior (i.e., maternal depression). Given the developmental stage of adolescence, it is reasonable to suggest that adolescents may be more influenced by situations and events that directly affect them.

Another interesting implication is how authoritarian and permissive parenting behaviors are related to maternal depression and adolescents' perceptions of family functioning. While maternal depression was associated with both types of parenting behaviors, a stronger correlation was found between maternal depression and *permissive* parenting than maternal depression and authoritarian parenting. Conversely, a stronger correlation was found between *authoritarian* parenting and adolescents' perceptions of family functioning than between permissive parenting and adolescents' perceptions of family functioning, and authoritarian parenting behaviors significantly predicted adolescents' perceptions of family functioning. Two inferences may be made from these results. One is that depressive symptoms such as withdrawal, loss of interest in daily activities, feelings of worthlessness, and decreased confidence can contribute to more permissive parenting behaviors. However, although mothers with depression may vacillate between authoritarian and permissive parenting behaviors and become more inconsistent in their parenting behaviors, authoritarian parenting behaviors have the greater impact on adolescents' experiences in the family.

Finally, the present study explored the moderating role that mother's couple relationship status may have in the association between maternal depression and parenting behaviors. For the most part, the findings did not support the hypotheses that the relation between maternal depression and mothers' use of authoritarian, permissive, and authoritative parenting would be stronger when mother's couple relationship status was unpartnered compared to partnered. Therefore, mother's couple relationship status was not found to moderate the relation between maternal depression and parenting behaviors.

There was one exception to the overall finding that partnership status did not moderate the relation between maternal depression and parenting behavior. There was a significant Pearson correlation between the maternal depression by couple relationship interaction term and permissive parenting behaviors. When the pattern of this interaction was explored by computing cell means for the four combinations of higher versus lower depression and unpartnered versus partnered relationship status, unpartnered mothers exhibited a greater difference in their degrees of permissive parenting behaviors between high and low levels of maternal depression, compared to partnered mothers. That pattern was consistent with the hypothesis.

There has been limited research regarding the moderating role of mother's relationship status. Previous studies have shown that single mothers report the highest level of depressive symptoms compared to partnered mothers and that adolescents of single-mother families report parenting behaviors characteristic of authoritarian parenting and chaotic family structures (Lara-Cinisomo & Griffin, 2007; Mandara & Murray, 2002). These studies have been interpreted as reflecting effects of stress that raising children alone have on the parent, but in the present study it cannot be assumed that being "partnered" means that a woman has parenting support from a partner. Because the *quality* rather than merely the existence of the women's relationships was not assessed, it is possible that this study's procedures did not provide an adequate test of the hypothesis.

Additionally, in the present study the average level of maternal depression reported for both partnered and unpartnered mothers was relatively mild. Depression scores of partnered mothers ranged from 0 to 38, and the mean score was 11, which corresponds to mild depression according to the BDI (Beck et al., 1979). Among

unpartnered mothers, BDI scores ranged from 0 to 36, with a mean score of 15. This average level of depression is still considered to be somewhat mild according to the BDI, but is a little higher compared to the partnered mothers, consistent with previous findings regarding differences in levels of depressive symptoms for single mothers compared to married mothers (Lara-Cinisomo & Griffin, 2007). Overall, the findings from the present study remain inconclusive regarding mother's relationship status as a factor in the association between maternal depression and parenting behaviors.

Limitations

Although the present study found associations between maternal depression and parenting behaviors, as well as associations between parenting behaviors and adolescents' perceptions of family functioning, there were some limitations to the study. The study was a cross-sectional design, and therefore limits the ability to fully assess the impacts of parenting behaviors on family functioning *over time* and to identify the direction of causality between parenting and adolescents' perceptions. Parenting behaviors may begin to shape a child's behaviors and experiences of family functioning at infancy. Therefore, future studies should replicate this study as a longitudinal design, assessing parenting behavior and children's views of their family at various points, to further assess the impact of parenting behaviors on children's perceptions of family functioning.

Additionally, the participants of the study were part of a clinical sample, making it difficult to generalize the results to the overall population of mothers and adolescents. Also, mothers reported on their relationship status and whether they lived with their romantic partner. However, mothers did not report the details (i.e., relationship, age) of

any other adults who were living in the household with them and their children. Therefore, it is possible that mothers who did not live with romantic partners may have lived with a family member who was considered a co-caregiver to the adolescent children. By not assessing the existence of co-caregivers in the family's household, results regarding the moderating role of mother's couple relationship status, specifically unpartnered mothers, may be limited. It is possible that the presence of *any* other adult who contributes to child-rearing may moderate the relation between maternal depression and parenting behavior.

There were also some limitations to the measurements used in the present study. The permissive parenting subscale of the PPQ has somewhat low internal consistency (.74) compared to the authoritarian and authoritative subscales of the measure (Coolahan, 1997). This lower internal consistency may limit the subscale's correlations with other measures, so caution should be taken when interpreting the results regarding permissive parenting behaviors. Additionally, some researchers have criticized the validity of the PPQ and its applicability to parenting behaviors of diverse cultures and ethnicities. Specifically, some state that Baumrind's parenting styles (1971, 1991) are largely based on White standards of parenting practices, and that normative African-American parenting behaviors are characterized more as authoritarian based on this typology (Coolahan, 1997; Murry et al., 2001). Consequently, the use of the PPQ may have limited the validity of the assessment of parenting behaviors with such a diverse sample of families. Future research should revise the PPQ to enhance its' cultural competency.

Another measure with limitations is the SFI. For the present study, total SFI summary scores were used to assess family functioning, rather than the five subscales

that the scale's designers originally intended for the measurement. Therefore, the construct validity of the measure as used in this study as an overall index of family functioning is not well established.

Additionally, two different versions of the SFI were administered to the sample in the original study upon which the present secondary data analysis was conducted: the original SFI was given for the first 3 years of data collection, and the revised SFI was supplemented during the fourth year of data collection. Consequently, the present researcher collapsed the two versions of the SFI to create a common measurement for the present study. However, this process may have compromised the reliability and validity of the measure somewhat. For example, some items which directly assessed global family functioning, as well as items that assessed parental leadership and marital conflict were omitted. These items may have strengthened the relation between maternal depression and family functioning had they been included.

Implications

Research Implications

The present study has many implications for future research. Although the findings from this research did not show an association between maternal depression and adolescents' perceptions of family functioning, future research should continue to investigate these variables to better understand how maternal depression may impact adolescents' experiences of the family. Additionally, findings from the present study showed that parenting behaviors had a greater impact on adolescents' perceptions of family functioning than did maternal depression. This seems to contradict past research that has focused on the direct impact of maternal depression on adolescent adjustment

and outcomes (Cummings, 1995; Cummings et al., 2000; Lewinsohn et al., 2005). However, given the developmental stage of adolescence, it is reasonable to suggest that adolescents are much more influenced by situations and events that directly affect them, such as parental discipline and warmth, rather than the presence of depression in a family member. The present findings show that these adolescents' perceptions of the family were associated with their mothers' parenting behavior that was directed toward them, and not by how depressed the mothers were. Future research could explore adolescents' views of their parents, especially regarding symptoms of parental depression, assessing what adolescents pay attention to and what meanings they attach to psychopathology symptoms. Future studies could also compare young adolescents' views to those of older adolescents, to identify any similarities or differences across this broad developmental stage.

Because the present findings also indicated that maternal depression was associated with parenting behavior, future research should explore the risk and resiliency factors of mothers with depression to understand the skills and coping strategies that strengthen their parenting skills in light of the presence of a mood disorder. The support of another adult may be important, but other personal characteristics may play greater roles in facilitating effective parenting. Additionally, the present findings indicate that maternal depression is more strongly associated with permissive parenting behaviors than with authoritarian parenting behaviors. This is reasonable given the extent to which withdrawal behaviors are characteristic of depressive symptoms (Beck et al., 1979). Future research also should explore the associations between maternal anxiety and types

of parenting behaviors in order to increase knowledge about the possible impact of anxiety symptoms on parenting.

The present study also extends knowledge regarding the relation between parenting behaviors and adolescents' perceptions of family functioning. Whereas past research has shown that authoritarian and permissive parenting behaviors are associated with greater emotional and behavioral problems in children (Baumrind, 1971, 1991; Burt et al., 2005), the present study suggests that these parenting behaviors also are associated with adolescents' *perceptions* of family functioning. This suggests the possibility of a broader impact of negative parenting behaviors such as forceful control, inconsistent discipline, and lack of warmth. Although causal direction cannot be concluded from correlational results such as these, the present study's findings are consistent with the idea that negative parenting behaviors not only impact child and adolescent outcomes, but also impact family functioning and the adolescent's experience within the family. This is consistent with family systems theory, in that negative parenting behaviors, which are demonstrated by an individual, may involve the family unit. Additionally, it is possible that less positive family functioning may impact parenting behaviors, thus illustrating the reciprocal nature of family systems (Kerr & Bowen, 1988). When a parent utilizes forceful control strategies and strict disciplinary actions while showing little warmth and understanding to their children, this may limit a child's ability to openly express their beliefs, concerns, and feelings to that parent. This may lead to a breakdown of communication in the family. Additionally, a parent who is inconsistent in setting limits and discipline may hinder a child's ability to understand and follow rules, as well as limit their understanding of the role of their parent as an authority figure. This may

lead to a breakdown of structure and conflict management in the family. Future research should continue to explore this phenomenon, especially with research designs that better address causal direction, to better ascertain the overarching impact of parenting behaviors.

Future studies also should consider the possibility that family stress could increase parents' use of particular parenting behaviors as well as increase parents' risk for developing depression. Prior research has demonstrated bidirectional influences between marital distress and partners' depression (Beach, 2002), and similar research could be conducted to test for such relations in family relationships as well.

The present study also explored the mediating role of parenting behaviors in the relation between maternal depression and adolescents' perceptions of family functioning. Although this mediating link was not supported directly, it should be noted that both authoritarian and permissive parenting behaviors were associated with both maternal depression and adolescents' perceptions of the family. Future research should explore these indirect relations and continue to investigate the potential mediating role that these parenting behaviors may have on the link between depression and family functioning.

Finally, while the present study did not support the moderating role of mothers' couple relationship status in the relation between maternal depression and parenting behaviors in the multiple regression analyses, there was a bivariate correlation indicating an association between the interaction term of maternal depression by couple relationship status and permissive parenting behaviors. Specifically, a greater difference was found in the degree of permissive parenting behaviors among unpartnered mothers from low to high levels of depression, compared to partnered mothers. This suggests that unpartnered

mothers may tend to exhibit more permissive parenting behaviors (i.e., inconsistent disciplinary methods, lax parental control) more often than partnered mothers when they experience more depressive symptoms. This trend was consistent with this study's premise that when under the emotional stress of depression, mothers who do not have a romantic partner to help share the burden of parental responsibility may become more insecure and inconsistent in their parenting methods. Further research should explore this possible impact and investigate the risk and resiliency factors that may prevent (i.e., the presence of co-caregivers, community support) or exacerbate (i.e., economic hardships, a stressful neighborhood environment) the moderating role of mother's couple relationship status.

Implications for Clinical Practice

The present study has implications to further clinical interventions. Findings from the present study added to previous research which shows that maternal depression impacts parenting behaviors. Specifically, the present study shows that higher levels of maternal depression are associated with greater use of authoritarian and permissive parenting behaviors. Past research has also shown how these parenting behaviors are associated with negative child and adolescent functioning. Thus, it seems important for clinicians to identify and intervene with mothers who are depressed, a population which continues to grow. Clinicians should specifically target parenting and anger management skills among mothers as a way to cope with depression and to decrease hostile parenting behaviors to maintain positive parent-child interactions.

Additionally, findings from the present study indicated an association between parenting behaviors and adolescents' experience of family functioning. These findings

showed that adolescents view their families as functioning less positively when their parents exhibit authoritarian and permissive parenting behaviors. This especially reflects family systems theory and the importance of balancing togetherness and individuality within families. Authoritarian parenting behaviors can sometimes undermine the importance of autonomy and the value placed on each family member's feelings, needs, and opinions. This further supports the findings from the current study that authoritarian parenting had a greater impact on adolescents' experiences of family functioning, because part of the developmental task of adolescence is to discover one's identity and develop opinions, beliefs, and goals that support greater autonomy. Conversely, permissive parenting behaviors can influence family togetherness by overemphasizing autonomy and distance as a way to avoid conflict and confrontation. The findings from the present study illustrate that a balance of togetherness and individuality found in authoritative parenting behaviors is associated with more positive family functioning (Baumrind, 1991; Kerr & Bowen, 1988). Thus, constructive and destructive parenting behaviors not only are associated with variations in forms of adolescent behaviors and psychological problems, but also are associated with adolescents' overall perceptions of family functioning. These findings indicate that clinicians should work with parents in adopting effective parenting strategies that support the parental role of authority while also integrating emotional expressiveness, warmth, and understanding toward their children.

Finally, the present study's findings have implications for working with families in which maternal depression is present. As noted previously, findings from the present study showed that parenting behaviors had a greater relationship with adolescents'

perceptions of family functioning than did the presence of maternal depression.

Therefore, clinicians who work with families comprised of adolescents and a depressed family member should focus on ways in which the behaviors resulting from depression may affect the family system. This clinical practice is a foundation of family systems theory, which states that problems that may arise from the mental diagnosis of one family member becomes a process that involves the family as a whole (Kerr & Bowen, 1988). Given the developmental stage of adolescence, targeting the ways in which a depressed individual's behaviors affect family members other than the adolescent and examining the resulting behaviors of these family members may be a helpful intervention. On the one hand, to the degree that adolescents tend to focus on their personal experiences more than experiencing empathy for other family members, therapeutic interventions that involve discussing how their family member's depression affects the adolescent and the family rather than learning about how it influences the depressed person may be productive. On the other hand, interventions that may increase all family members' empathic responses regarding each other's experiences may increase emotional connections between adolescents and parents.

Appendix A: BDI Beck Depression Inventory (BDI)

Directions: On this questionnaire are groups of statements. Please read each group of statements carefully. Then pick out the one statement in each group which best describes the way you have been feeling the *PAST WEEK*, **INCLUDING TODAY!** Circle the number beside the statement you picked. If several statements in the group seem to apply equally well, circle each one.

- 1. 0 I do not feel sad.
 - 1 I feel sad.
 - 2 I am sad all the time and I can't snap out of it.
 - 3 I am so sad or unhappy that I can't stand it.
- 2. 0 I am not particularly discouraged about the future.
 - 1 I feel discouraged about the future.
 - 2 I feel I have nothing to look forward to.
 - 3 I feel that the future is hopeless and that things cannot improve.
- 3. 0 I do not feel like a failure.
 - 1 I feel I have failed more than the average person.
 - 2 As I look back on my life, all I can see is a lot of failures.
 - 3 I feel I am complete failure as a person.
- 4. 0 I get as much satisfaction out of things as I used to.
 - 1 I don't enjoy things the way I used to.
 - 2 I don't get real satisfaction out of anything anymore.
 - 3 I am dissatisfied or bored with everything.
- 5. 0 I don't feel particularly guilty.
 - 1 I feel guilty a good part of the time.
 - 2 I feel quite guilty most of the time.
 - 3 I feel guilty all the time.
- 6. 0 I don't feel I am being punished.
 - 1 I feel I may be punished.
 - 2 I expect to be punished.
 - 3 I feel I am being punished.
- 7. 0 I don't feel I am worse than anybody else.
 - 1 I am disappointed in myself.
 - 2 I am disgusted with myself.
 - 3 I hate myself.

8. 0 I don't feel I am any worse than anybody else.

- 1 I am critical of myself for my weaknesses or mistakes.
- 2 I blame myself all the time for my faults.
- 3 I blame myself for everything bad that happens.
- 9. 0 I don't have any thoughts of killing myself.
 - 1 I have thoughts of killing myself, but I would not carry them out.
 - 2 I would like to kill myself.
 - 3 I would kill myself if I had the chance.
- 10. 0 I don't cry any more than usual.
 - 1 I cry more than I used to.
 - 2 I cry all the time now.
 - 3 I used to be able to cry, but now I can't cry even though I want to.

- 11. 0 I am no more irritated now than I have ever been.
 - 1 I get annoyed or irritated more easily than I used to.
 - 2 I feel irritated all the time now.
 - 3 I don't get irritated at all by the things that used to irritate me.
- 12. 0 I have not lost interest in other people.
 - 1 I am less interested in other people than I used to be.
 - 2 I have lost most of my interest in other people.
 - 3 I have lost all of my interest in other people.
- 13. 0 I make decisions about as well as I ever could.
 - 1 I put off making decisions more than I used to.
 - 2 I have greater difficulty in making decision than before.
 - 3 I can't make decisions at all anymore.
- 14. 0 I don't feel I look any worse than I used to.
 - 1 I am worried that I am looking old or unattractive.
 - 2 I feel that there are permanent changes in my appearance that make me look unattractive.
 - 3 I believe that I look ugly.
- 15. 0 I can work about as well as before.
 - 1 It takes an extra effort to get started at doing something.
 - 2 I have to push myself very hard to do anything.
 - 3 I cant' do any work at all.
- 16. 0 I can sleep as well as usual.
 - 1 I don't sleep as well as I used to.
 - 2 I wake up 1-2 hours earlier than usual and find it hard to get back to sleep.
 - 3 I wake up several hours earlier than I used to and cannot get back to sleep.
- 17. 0 I don't get more tired than usual.
 - 1 I get tired more easily than I used to.
 - 2 I get tired more doing almost anything.
 - 3 I am too tired to do anything.
- 18. 0 My appetite is no worse than usual.
 - 1 My appetite is not as good as it used to be.
 - 2 My appetite is much worse now.
 - 3 I have no appetite at all anymore.
- 19. 0 I haven't lost much weight, if any, lately.
 - 1 I have lost more than 5 pounds.
 - 2 I have lost more than 10 pounds.
 - 3 I have lost more than 15 pounds.

I am purposely trying to lose weight. Yes ____ No ____

- 20. 0 I am no more worried about my health than usual.
 - 1 I am worried about physical problems such as aches, pains, an upset stomach or constipation.
 - 2 I am very worried about physical problems and it's hard to think of much else.
 - 3 I am so worried about my physical problems that I cannot think about anything else.
- 21. 0 I have not noticed any recent change in my interest in sex.
 - 1 I am less interested in sex than I used to be.
 - 2 I am much less interested in sex now.
 - 3 I have lost interest in sex completely.

Appendix B: PPQ Parenting Practices Questionnaire

Directions: This questionnaire is about your parenting practices. Think about what you usually do as a parent in the raising of your child or children and select the response that best indicates how often you usually do the following things: (If you have one child, respond as you usually do to that child in general.)

1. Never 2. Once in a while 3. About half of the time 4. Very often 5. Always

- 1. I encourage my children to talk about their troubles.
- 2. I guide my children by punishment more than by reason.
- 3. I know the names of my children's friends.
- 4. I find it difficult to discipline my children.
- 5. I give praise when my children are good.
- 6. I spank when my children are disobedient.
- 7. I joke and play with my children.
- 8. I don't scold or criticize even when my children act against my wishes.
- 9. I show sympathy when my children are hurt or frustrated.
- 10. I punish by taking privileges away from my children with little if any explanation.
- 11. I spoil my children.
- 12. I give comfort and understanding when my children are upset.
- 13. I yell or shout when my children misbehave.
- 14. I am easy going and relaxed with my children.
- 15. I allow my children to annov someone else.
- 16. I tell my children my expectations regarding behavior before they engage in an activity.
- 17. I scold and criticize to make my children improve.
- 18. I show patience with my children.
- 19. I grab my children when they are disobedient.
- 20. I state punishments to my children, but I do not actually do them.
- 21. I am responsive to my children's feelings or needs.
- 22. I allow my children to help make family rules.
- 23. I argue with my children.
- 24. I appear confident about my parenting abilities.
- 25. I give my children reasons why rules should be obeyed.
- 26. I appear to be more concerned with my own feelings than with my children's feelings.
- 27. I tell my children that we appreciate what they try to accomplish.
- 28. I punish by putting my children off somewhere alone with little if any explanation.
- 29. I help my children to understand the effects of behavior by encouraging them to talk about the consequences of their own actions.
- 30. I am afraid that disciplining my children for misbehavior will cause them not to like me.
- 31. I take my children's desires into account before asking them to do something.
- 32. I explode in anger towards my children.
- 33. I am aware of problems or concerns about my children in school.
- 34. I threaten my children with punishment more often than I actually give it.
- 35. I express affection by hugging, kissing, and holding my children.
- 36. I ignore my children's misbehavior.
- 37. I use physical punishment as a way of disciplining my children.
- 38. I carry out discipline after my children misbehave.
- 39. I apologize to my children when making a mistake in parenting.
- 40. I tell my children what to do.
- 41. I give into my children when they cause a commotion about something.
- 42. I talk it over and reason with my children when they misbehave.
- 43. I slap my children when they misbehave.
- 44. I disagree with my children.
- 45. I allow my children to interrupt others.

1. Never 2. Once in a while 3. About half of the time 4. Very often 5. Always

- 46. I have warm and intimate times together with my children.
- 47. When two children are fighting, I discipline the children first and ask questions later.
- 48. I encourage my children to freely express themselves.
- 49. I bribe my children with rewards to get them to do what I want.
- 50. I scold or criticize when my children's behavior doesn't meet my expectations.
- 51. I show respect for my children's opinions by encouraging them to express them.
- 52. I set strict well-established rules for my children.
- 53. I explain to my children how I feel about their good and bad behavior.
- 54. I use threats as punishment with little or no justification.
- 55. I take into account my children's preferences in making plans for the family.
- _____ 56. When my children ask why they have to conform, I state: "Because I said so" or, "I am your parent and I want you to."
- 57. I appear unsure about how to solve my children's misbehavior.
- 58. I explain the consequences of my children's behavior.
- 59. I demand that my children do things.
- 60. When my children misbehave, I channel their behavior into a more acceptable activity.
- 61. I shove my children when they are disobedient.
- 62. I emphasize the reasons for rules.

Appendix C: SFI Beavers Self-report Family Inventory (SFI)

	YES:		SOME:		NO:
	Fits our		Fits our		Does not
	family		family		fit our
	very well		some		family
1. Family members pay attention to each other's feelings.	1	2	3	4	5
2. Our family would rather do things together than with other people.	1	2	3	4	5
3. We all have a say in family plans.	1	2	3	4	5
4. The grownups in this family understand and agree on family decisions.	1	2	3	4	5
5. Grownups in the family compete and fight with each other.	1	2	3	4	5
6. There is closeness in my family, but each person is allowed to be special and different.	1	2	3	4	5
7. We accept each other's friends.	1	2	3	4	5
8. There is confusion in our family because there is no leader.	1	2	3	4	5
9. Our family members touch and hug each other.	1	2	3	4	5
10. Family members put each other down	1	2	3	4	5
11. We speak our minds, no matter what.	1	2	3	4	5
12. In our home, we feel loved.	1	2	3	4	5
13. Even when we feel close, our family is embarrassed to admit it.	1	2	3	4	5
14. We argue a lot and never solve problems.	1	2	3	4	5
15. Our happiest times are at home.	1	2	3	4	5
16. The grownups in this family are strong leaders.	1	2	3	4	5
17. The future looks good to our family.	1	2	3	4	5
18. We usually blame one person in our family when things aren't going right.	1	2	3	4	5
19. Family members go their own way most of the time.	1	2	3	4	5
Our family is proud of being close.	1	2	3	4	5
20. Our family is good at solving problems together.	1	2	3	4	5
21. Family members easily express warmth and caring toward each other	1	2	3	4	5
22. It's okay to fight and yell in our family.	1	2	3	4	5
23. One of the adults in this family has a favorite child.	1	2	3	4	5
24. When things go wrong, we blame each other.	1	2	3	4	5
25. We say what we think and feel.	1	2	3	4	5
26. Our family members would rather do things with	1	2	3	4	5
other people than together. 27. Family members pay attention to each other and listen to what is said.	1	2	3	4	5
28. We worry about hurting each other's feelings.	1	2	3	4	5
29. The mood in my family is usually sad and blue.	1	2	3	4	5
30. We argue a lot.	1	2	3	4	5
31. One person controls and leads the family.	1	2	3	4	5
32. My family is happy most of the time.	1	2	3	4	5
52. The family is happy most of the time.	_	4	5		5

Directions: For each question, circle the answer that best fits how you see your family now.

	YES:		SOME:		NO:
	Fits our		Fits our		Does not
	family		family		fit our
	very well		some		family
33. Each person takes responsibility for his/	1	2	3	4	5
her behavior					

34. On a scale of 1 to 5, I would rate my family as: (Circle the number)

1	2	3	4	5
My family functions				My family does not
well together				function well
				together at all

36. On a scale of 1 to 5, I would rate my family as: (Circle the number)

1	2	3	4	5
No one is independent. There are no arguments. Fa members rely each other for satisfaction ra than on outsid	open amily 7 on r ather	Sometimes independent. There are some disagreements. Family members find satisfaction both within and outside of the family		Family members usually go their own way. Disagreements are open. Family members look outside of the family for satisfaction.

Appendix D: Demographic Questionnaire Family/Individual Information and Instructions

This is the first in a series of questionnaires you are being asked to complete that will contribute to the knowledge about individual and family therapy. In order for our research to measure progress over time we will periodically re-administer questionnaires. Please answer the questions at a relatively fast pace, usually the first response that comes to mind is the best one. **There are no right or wrong answers.**

4. Date:		Case #:
		Therapist's(s') Code:
	3.	
The following information is gathered from each failed from each failed from each failed from each failed from the second	amily member separately	у.
Name:(Print) E-mail address:		ZIP
Phone Numbers: (h)	(w)	
(cell)	(fax)	
5. Gender: <u>M F</u> 6. SSN	7. Ag	e (in years):
8. You are coming for: a.) Family b.) C	Couple c.) Inc	lividual therapy.
 9. Relationship Status 1. Currently married, 1 2. Currently married, s 3. Divorced, legal active 4. Living together, not 10. Years Together: 	separated, but not divorce on completed	 5. Separated, not married d. Dating, not living together 7. Single 8. Widowed/ Widower 9. Domestic partnership
 11. What is your occupation?12. 1. Clerical sales, bookkeeper, secretary 2. Executive, large business owner 3. Homemaker 4. None – child not able to be employed 5. Owner, manager of small business 6. Professional - Associates or Bachelors de 7. Professional – master or doctoral degree 8. Skilled worker/craftsman 9. Service worker – barber, cook, beautician 10. Semi-skilled worker 12. Student 	1.Employed2.Employed3.Homemal4.Student5.Disabled,gree6.Unemploy7.Retired	d full time 1 part time ker, not employed outside home not employed
13. Personal yearly <u>gross</u> income:\$ (before taxes or any deductions)	2 3. 4. 1 5.	Native American African American Asian/Pacific Islander Hispanic White Other (specify)
15. What is your country of origin ? What was your parent's country of origin ? 16	(father's)	17(mother's)
18. Highest Level of Education Completed:	 Some high school High school diploma Some college Associate degree Bachelors degree 	6. Some graduate educationa 7. Masters degree8. Doctoral degree9. Trade school

- 19. Number of **people in your Household**:_____ 20. Number of **children** who **live at home** with you: _____
 - 21. Number of children who **do not live** with you:

Names and Phone Numbers of **Contact People** in case of emergency (minimum 2):

- 22. What is your religious preference? _____ 1. Mainline Protestant (e.g., Episcopal, Lutheran, Methodist,
 - 2. Conservative Protestant (e.g., Adventist, Baptist, Pentecostal) Presbyterian, Unitarian)
 - 3. Roman Catholic 4. Jewish 5. Other (e.g., Buddhist, Mormon, Hindu) Please Specify 6. No affiliation with any formal religion

23. How often do you participate in organized activities of a church or religious group?____

- 1. Several times per week
- 2. Once a week
- 5. Several times a year 6. Once or twice a year
- 3. Several times a month
 - 7. Rarely or never
- 4. Once a month

24. How important is religion or spirituality to you in your daily life? ____

1. Very important 2. Important 3. Somewhat important 4. Not very important 5. Not important at all

25. Medications: ____Yes ____No. If yes, please list the <u>names</u>, <u>purpose</u>, and <u>quantity</u> of the medication(s) you are currently taking. Also list the name and phone number of the medicating physician(s) and your primary care physician:

Medications:

Primary Care Physician:	Phone:
Psychiatrist? Yes/No Name & Phone, if yes.	Phone:

Legal Involvement:

26. Have you ever been involved with the police/legal authorities? Yes/No (circle) If yes, please explain:

27. Have formal, legal procedures (e.g., ex-parte orders, protection orders, criminal charges, juvenile offenses) been brought against you? Yes/No (circle) If yes, please explain:

28...If formal procedures were brought, what were the results (e.g., eviction, restraining orders)?

29. Many of the questions refer to your "family." It will be important for us to know what individuals you consider to be your family. Please list below the names and relationships of the people you will be including in your responses to questions about your family. Circle yourself in this list. (Number listed in family) .

Name

Relationship

List the concerns and problems for which you are seeking help. Indicate which is the most important by <u>circling it</u>. For each problem listed, note the degree of severity by checking ($\sqrt{}$) the appropriate column. 3 -Somewhat

	5 Some what			
	4 - Severe	Severe	2 - Moderate	1 - Mild
30.	31.			
32.	33.			
34.	35.			
36.	37.			

38. The most important concern (circled item) is #_____.

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